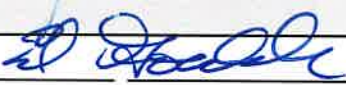


IAP Cover Sheet		Version Name: Period 10	
Incident Name: 2018 Superior Refinery Fire		Period: Period 10 [05/19/2018 06:00 - 05/22/2018 06:00]	
Approved By			
Incident Commander: Goedde, Ed			
<h1>Incident Action Plan</h1>			
IAP Cover Sheet		Prepared By Planning, Updated 05/18/2018 07:17 UTC -6:00 PP	
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Incident Name: 2018 Superior Refinery Fire
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Period: Period 10 [05/19/18 06:00 - 05/22/18 06:00]
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Weather Report			Version Name: 20180518_1600		
Incident Name: 2018 Superior Refinery Fire			Period: Period 10 [05/19/2018 06:00 - 05/22/2018 06:00]		
Present Conditions					
Weather Conditions as of 05/18/2018 15:18					
superior, wi us station id: MID_KSUW					
Humidity (%): 58 Wind Speed: 13 mph Wind Direction (from): ENE Temperature: 49 Fahrenheit Visibility: 10 mile(s)			Pressure: 30 psi Dew Point: 35 Feels Like: 44 UV Index:		
Sunny					
Forecast Date	Wind	Temp High/Low	% Precip	Sunrise/Sunset	Notes
Fri 05/18/2018	10 mph ENE	45 F	20		Isolated showers after 11pm. Increasing clouds, with a low around 45. Breezy, with an east wind 5 to 15 mph becoming south after midnight. Winds could gust as high as 20 mph. Chance of precipitation is 20%.
Sat 05/19/2018	10 mph W	57 F	30		A 30 percent chance of showers, mainly after noon. Mostly cloudy, with a high near 57. Breezy, with a west wind 5 to 15 mph becoming northeast in the afternoon. Winds could gust as high as 20 mph.
	5 mph NE	37 F	20		A 20 percent chance of showers before 1am. Partly cloudy, with a low around 37. Northeast wind 5 to 10 mph.
Sun 05/20/2018	5 mph E	64 F	10		Sunny, with a high near 64. East wind around 5 mph.
	5 mph E	41 F	0		Mostly clear, with a low around 41. East wind around 5 mph becoming north after midnight.
Mon 05/21/2018	6 mph NE	65 F	10		Mostly sunny, with a high near 65.
	5 mph E	42 F	10		Partly cloudy, with a low around 42.
Tides					
Weather Report			Prepared By Situation Unit, Updated 05/18/2018 15:33 UTC -6:00 PP		
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Incident Map/Sketch

20180514\_Impacted Area



### Map/Sketch

Version Name: 20180514_Processing Plant Imagery
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Incident Name: 2018 Superior Refinery Fire
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Period: Period 10 [05/19/2018 06:00 - 05/22/2018 06:00]
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<i>Incident Map/Sketch</i>
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20180514_Processing Plant Imagery
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## Map/Sketch

Prepared By Travis Hill, Updated 05/14/2018 18:17 UTC -6:00 PP

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Incident Map/Sketch

20180514 Hot/Warm Zone



Incident Map/Sketch

20180514\_Map for Crane





ICS 202b - Critical Information Requirements		Version Name: Period 10	
Incident Name: 2018 Superior Refinery Fire		Period: Period 10 [05/19/2018 06:00 - 05/22/2018 06:00]	
<h2>Incident Command - Critical Threshold Reporting Criteria</h2> <p><b>** If any of these conditions are met, Incident Commander must be notified immediately **</b></p> <ul style="list-style-type: none"><li>• Injury or Death (OSHA/1st Aid or greater through Safety Officer)</li><li>• Significant change of status of site conditions</li><li>• Public health impacts</li><li>• Impacted sensitive areas beyond protection/Any change to trajectories</li><li>• Loss of major tactical resources</li><li>• Unplanned VIP visits en-route/planning/arriving</li><li>• Adverse protest plans or interview requests</li><li>• Adverse political/influence</li><li>• Loss or breach of containment</li><li>• Any breach in safety/investigation zone</li><li>• Special requests from agencies</li><li>• Any changes to respiratory requirements (eg: SCBA)</li><li>• Any evidence wildlife impact</li><li>• Any exceedance of an air monitoring action level</li></ul>			
ICS 202b - Critical Information Requirements		Prepared By Long, David, Updated 05/15/2018 13:11 UTC -6:00 PP	
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<b>ICS 204 - Assignment List</b>			Task Force: De-Inventory Task Force	
Incident Name: 2018 Superior Refinery Fire			Period: Period 10 [05/19/2018 06:00 - 05/22/2018 06:00]	
<b>Operations Personnel</b>				
<b>Position</b>	<b>Name</b>	<b>Affiliation</b>	<b>Contact Number(s)</b>	<b>Work Shift</b>
Operations Section Chief	Fredman, Peter	Husky Energy Inc.	320-288-6161	
Deputy Operations Section Chief	Schade, Kollin	Husky Energy Inc.	317-292-6594	
Stabilization Group Supervisor	Thom, Tim	Husky Energy Inc.	715-817-8016	
De-Inventory Task Force	Laszewski, Aaron	Husky Energy Inc.	920-883-1992	
De-Inventory Task Force	Ivanca, Erin	Husky Energy Inc.	651-592-6339	
De-Inventory Task Force	Campbell, Adam	Husky Energy Inc.	218-491-4920	
De-Inventory Task Force Leader	Witherill, Troy	Husky Energy Inc.	218-522-0114	
<b>Resources Required</b>				
<b>Area Of Operation</b>	<b>Resource Kind</b>	<b>Description</b>	<b>Quantity</b>	<b>Size</b>
De-Inventory Task Force	Manpower: Responder	Engineer	7	
De-Inventory Task Force	Manpower: Responder	Project Manager	1	
De-Inventory Task Force	Manpower: Responder	Project Control	1	
De-Inventory Task Force	Equipment: Safety	VCU	2	
De-Inventory Task Force	Manpower: Responder	Contractors	29	
<b>Assignments</b>				
De-inventory the Platformer unit as per approved plan.				
De-inventory the Main column overhead receiver as per approved plan.				
Continue to develop the hydrocarbon de-inventory plans for priority assets:				
- FCC Gas con stripper				
- FCC Gas con Debutanizer				
- ISOM				
- #2 Hydrobon				
- #2 DUF				
- North Crude				
- Main column overhead receiver				
SRS/Evergreen to assist with plan development				
**No operations on additional units until final approvals have been completed**				
Hydrocarbon de-inventory plan for each unit will be approved by the following:				
- Incident Commander				
- Operations Section Chief				
- Planning Section Chief				
- Environmental Unit Leader				
- Safety Officer				
- Lead Investigator				
<b>Communications</b>				
<b>Name / Function</b>		<b>Contact Details</b>		
ERT Channel		8		
Channel 1 Talk Around		11		
Primary		1		
<b>ICS 204 - Assignment List</b>		Updated 05/07/2018 17:09 UTC -6:00		
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<b>ICS 204 - Assignment List</b>		Task Force: De-Inventory Task Force	
Incident Name: 2018 Superior Refinery Fire		Period: Period 10 [05/19/2018 06:00 - 05/22/2018 06:00]	
<b>Communications</b>			
<b>Name / Function</b>	<b>Contact Details</b>		
Secondary	2		
Radio	3 to 7		
<b>Special Environmental Considerations</b>			
<p>Actions shall be taken to minimize any release of hydrocarbons to the environment. Any liquid hydrocarbon release shall be cleaned up immediately and disposed of properly.</p> <p>Prior to commencing de-inventory activities, notify GHD so task specific monitoring can commence to verify site and public safety. Once de-inventory events commence, notification of any venting/release of vapor/liquid hydrocarbon to the environment shall be made to the GHD air monitoring group immediately for consideration in air monitoring.</p> <p>Actions shall be taken to minimize any release of hydrocarbons to the environment. Any liquid hydrocarbon release shall be cleaned up immediately and disposed of properly.</p>			
<b>Special Site-Specific Safety Considerations</b>			
<p>Refer to individual De-inventory safety plans for additional requirements.</p> <p>If in Hot Zone, must follow Hot Zone Procedures. All other areas in the refinery require FR clothing, Hard Hat, Safety Glasses and safety boots. Refer to Permit writers for further guidance.</p> <p>A Safe Work Permit is required for all work. Safe Work Permits can be obtained in the ERT Building.</p> <p>Ensure that air monitoring, including 4-Gas and product specific (Benzene, Hydrogen Sulfide, etc.) is done during the de-inventory process.</p> <p>Hazard assessment must be done to plan safe work.</p> <p>Be cognizant of the hazards of the hazards of Nitrogen, unit contents including Benzene, H2S, petroleum products, etc.</p> <p>Use flashlights, vehicle lights and other lighting during nighttime activities. If warranted, request light plants and other larger lighting.</p> <p>For work in the hot zone or where damage has occurred to equipment, area must be assessed for asbestos and other hazardous materials by an Industrial Hygienist or Wisconsin Licensed Asbestos personnel prior to their work. Safe work permit request must include request for this determination. Any concerns found as part of this assessment must be addressed prior to any work being done.</p>			
<b>Additional Information</b>			
<p>If impacted wildlife are observed. Do not approach or attempt to capture. Please contact Husky Hill Avenue guard shack at 715-398-8220 or 221</p>			
<b>ICS 204 - Assignment List</b>		Updated 05/07/2018 17:09 UTC -6:00	
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<b>ICS 204 - Assignment List</b>			Task Force: Chemical Removal Task Force	
Incident Name: 2018 Superior Refinery Fire			Period: Period 10 [05/19/2018 06:00 - 05/22/2018 06:00]	
<b>Operations Personnel</b>				
<b>Position</b>	<b>Name</b>	<b>Affiliation</b>	<b>Contact Number(s)</b>	<b>Work Shift</b>
Operations Section Chief	Fredman, Peter	Husky Energy Inc.	320-288-6161	
Deputy Operations Section Chief	Schade, Kollin	Husky Energy Inc.	317-292-6594	
Stabilization Group Supervisor	Thom, Tim	Husky Energy Inc.	715-817-8016	
Chemical Removal Task Force Leader	McCusker, Brian	Husky Energy Inc.	218-348-9769	
<b>Resources Required</b>				
<b>Area Of Operation</b>	<b>Resource Kind</b>	<b>Description</b>	<b>Quantity</b>	<b>Size</b>
Chemical Removal Task Force	Manpower: Responder	Day Shift Responders	4	
Chemical Removal Task Force	Manpower: Responder	Night Shift Responders	7	
<b>Assignments</b>				
<p>Operations will:</p> <ul style="list-style-type: none"> <li>- Continue HF air monitoring</li> <li>- Maintain deluge system around HF tank</li> <li>- Impliment assignments per the store in place bow tie action tracker.</li> <li>- Impliment the assignments for the API 751 audit.</li> </ul> <p><b>**No additional operations until final approvals have been received**</b></p> <p>Four (4) options continue to be developed in parallel by HF Alkylation Consultants and SPSI in order to evaluate and mitigate risk:</p> <ol style="list-style-type: none"> <li>1) Neutralize on-site</li> <li>2) Transfer to an off-site facility</li> <li>3) Retain on-site with safeguards in place</li> <li>4) Other safe management alternatives</li> </ol>				
<b>Communications</b>				
<b>Name / Function</b>	<b>Contact Details</b>			
ERT Channel	8			
Channel 1 Talk Around	11			
Primary	1			
Secondary	2			
Radio	3 to 7			
<b>Special Environmental Considerations</b>				
<p>All precautions should be taken to minimize release of any chemical to the environment. If chemical is released the environmental unit leader shall be notified immediately. Actions shall be taken to minimize any release of hydrocarbons to the environment. Any liquid hydrocarbon release shall be cleaned up immediately and disposed of properly. Notification of any venting/release of vapor/liquid hydrocarbon shall be made to the GHD air monitoring group immediately for consideration in air monitoring. Any liquid hydrocarbon release shall be cleaned up immediately.</p>				
<b>ICS 204 - Assignment List</b>			Updated 05/11/2018 15:20 UTC -6:00	
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ICS 204 - Assignment List		Task Force: Chemical Removal Task Force	
Incident Name: 2018 Superior Refinery Fire		Period: Period 10 [05/19/2018 06:00 - 05/22/2018 06:00]	
Special Site-Specific Safety Considerations			
If in Hot Zone, must follow Hot Zone Procedures including Bunker Gear, ERT escort, 4-Gas Monitor and sign in at ERT Response Center.			
In Alky Unit, fixed HF air monitors do not currently work. Rely on personal HF monitors and area monitors for determination of HF within the air.			
In Alky Unit, fixed water cannons are not operational. If there is a potential for a leak of HF Acid, stage water nozzles and verify antiques coverage of water spray to mitigate a release.			
If in Warm or Cold Zone, refinery PPE must be worn except where HF Alky Gear is required and that must be worn. Refer to Permit writers for further guidance.			
A Safe Work Permit is required for all work. Safe Work Permits can be obtained in the ERT Building.			
Hazard assessment must be done to plan safe work.			
Be cognizant of the hazards of the products being handled including hydrofluoric acid and other hazards of the Alkylation Unit.			
Emergency Alarm system will signal need to evacuate from the site.			
Use flashlights, vehicle lights and other lighting during nighttime activities. If warranted, request light plants and other larger lighting.			
For work in the hot zone or where damage has occurred to equipment, area must be assessed for asbestos and other hazardous materials by an Industrial Hygienist or Wisconsin Licensed Asbestos personnel prior to their work. Safe work permit request must include request for this determination. Any concerns found as part of this assessment must be addressed prior to any work being done.			
Be aware of the potential for severe weather. In the refinery, the Shift Foreman will make an announcement on the plant radio system if there are special precautions or if there is a need to take shelter.			
Additional Information			
If impacted wildlife are observed. Do not approach or attempt to capture. Please contact Husky Hill Avenue guard shack at 715-398-8220 or 221			
ICS 204 - Assignment List		Updated 05/11/2018 15:20 UTC -6:00	
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<b>ICS 204 - Assignment List</b>			Task Force: Steam Task Force	
Incident Name: 2018 Superior Refinery Fire			Period: Period 10 [05/19/2018 06:00 - 05/22/2018 06:00]	
<b>Operations Personnel</b>				
<b>Position</b>	<b>Name</b>	<b>Affiliation</b>	<b>Contact Number(s)</b>	<b>Work Shift</b>
Operations Section Chief	Fredman, Peter	Husky Energy Inc.	320-288-6161	
Deputy Operations Section Chief	Schade, Kollin	Husky Energy Inc.	317-292-6594	
Stabilization Group Supervisor	Thom, Tim	Husky Energy Inc.	715-817-8016	
Steam Task Force Leader	Amato, Joe	Husky Energy Inc.	715-969-7724	
Steam Task Force Leader	Smith, Doug	Nexus Engineering	419-346-5987	
<b>Resources Required</b>				
<b>Area Of Operation</b>	<b>Resource Kind</b>	<b>Description</b>	<b>Quantity</b>	<b>Size</b>
Steam Task Force	Manpower: Responder	Day Shift Responders	3	
Steam Task Force	Manpower: Responder	Engineer	1	
Steam Task Force	Manpower: Responder	Project Manager	1	
<b>Assignments</b>				
Develop plan to re-instate steam on site to enable long term preservation of assets. Plan to include evaluation of bring on site package boiler and associated permits.				
Identify safe isolation and tie in points for packaged boiler.				
Finalized Plan to be reviewed and approved by:				
<ul style="list-style-type: none"> <li>- Operations Section Chief</li> <li>- Planning Section chief</li> <li>- Safety Officer</li> <li>- Environmental Unit Lead</li> <li>- Incident Commander</li> </ul>				
**No operations to proceed prior to approval and permits in place**				
<b>Special Environmental Considerations</b>				
If temporary boiler is needed a permit/exemption letter from the WDNR will need to be obtained prior to bringing it on-site.				
<b>Special Site-Specific Safety Considerations</b>				
If in Hot Zone, must follow Hot Zone Procedures. All other areas in the refinery require FR clothing, Hard Hat, Safety Glasses and safety boots. Refer to Permit writers for further guidance.				
A Safe Work Permit is required for all work. Safe Work Permits can be obtained in the ERT Building.				
When working along the refinery perimeter, be cognizant of slip, trip and fall hazards.				
Use flashlights, vehicle lights and other lighting during nighttime activities. If warranted, request light plants and other larger lighting.				
Emergency Alarm system will signal need to evacuate from the site.				
For work in the hot zone or where damage has occurred to equipment, area must be assessed for asbestos and other hazardous materials by an Industrial Hygienist or Wisconsin Licensed Asbestos personnel prior to their work. Safe work permit request must include request for this determination. Any concerns found as part of this assessment must be addressed prior to any work being done.				
Be aware of the potential for severe weather. In the refinery, the Shift Foreman will make an announcement on the plant radio system if there are special precautions or if there is a need to take shelter.				
<b>ICS 204 - Assignment List</b>			Updated 05/14/2018 11:49 UTC -6:00	
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ICS 204 - Assignment List		Task Force: Steam Task Force	
Incident Name: 2018 Superior Refinery Fire		Period: Period 10 [05/19/2018 06:00 - 05/22/2018 06:00]	
Additional Information			
If impacted wildlife are observed. Do not approach or attempt to capture. Please contact Husky Hill Avenue guard shack at 715-398-8220 or 221			
ICS 204 - Assignment List		Updated 05/14/2018 11:49 UTC -6:00	
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<b>ICS 204 - Assignment List</b>			Task Force: Pyrophoric Task Force	
Incident Name: 2018 Superior Refinery Fire			Period: Period 10 [05/19/2018 06:00 - 05/22/2018 06:00]	
<b>Operations Personnel</b>				
<b>Position</b>	<b>Name</b>	<b>Affiliation</b>	<b>Contact Number(s)</b>	<b>Work Shift</b>
Operations Section Chief	Fredman, Peter	Husky Energy Inc.	320-288-6161	
Deputy Operations Section Chief	Schade, Kollin	Husky Energy Inc.	317-292-6594	
Stabilization Group Supervisor	Thom, Tim	Husky Energy Inc.	715-817-8016	
Pyrophoric Task Force Leader	Campbell, Adam	Husky Energy Inc.	218-491-4920	
<b>Resources Required</b>				
<b>Area Of Operation</b>	<b>Resource Kind</b>	<b>Description</b>	<b>Quantity</b>	<b>Size</b>
Pyrophoric Task Force	Foreman	Foreman	2	
<b>Assignments</b>				
Identify the high risk areas for iron sulfide and mitigation measures.				
<b>Special Site-Specific Safety Considerations</b>				
<p>If in Hot Zone, must follow Hot Zone Procedures. All other areas in the refinery require FR clothing, Hard Hat, Safety Glasses and safety boots. Refer to Permit writers for further guidance.</p> <p>Be cognizant of the hazards of the products being handled.</p> <p>If working along the permitter fence or other Husky property outside of refinery, contact security guards at 715-398-8220 to make them aware of your presence. Otherwise, the police will be called.</p> <p>When working along the refinery perimeter, be cognizant of slip, trip and fall hazards.</p> <p>Use flashlights, vehicle lights and other lighting during nighttime activities. If warranted, request light plants and other larger lighting.</p> <p>Emergency Alarm system will signal need to evacuate from the site.</p> <p>For work in the hot zone or where damage has occurred to equipment, area must be assessed for asbestos and other hazardous materials by an Industrial Hygienist or Wisconsin Licensed Asbestos personnel prior to their work. Safe work permit request must include request for this determination. Any concerns found as part of this assessment must be addressed prior to any work being done.</p> <p>Be sure to wear a life jacket when working over water. Life jackets are available in the Warehouse.</p> <p>Inspect for ticks when traveling in grassy or wooded areas.</p> <p>Be aware of the potential for severe weather. In the refinery, the Shift Foreman will make an announcement on the plant radio system if there are special precautions or if there is a need to take shelter.</p>				
<b>ICS 204 - Assignment List</b>			Updated 05/18/2018 12:53 UTC -6:00	
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<b>ICS 204 - Assignment List</b>			Task Force: Energy Restoration Task Force	
Incident Name: 2018 Superior Refinery Fire			Period: Period 10 [05/19/2018 06:00 - 05/22/2018 06:00]	
<b>Operations Personnel</b>				
<b>Position</b>	<b>Name</b>	<b>Affiliation</b>	<b>Contact Number(s)</b>	<b>Work Shift</b>
Operations Section Chief	Fredman, Peter	Husky Energy Inc.	320-288-6161	
Deputy Operations Section Chief	Schade, Kollin	Husky Energy Inc.	317-292-6594	
Mechanical Group Supervisor	Rikkola, Ken	Husky Energy Inc.	218-343-9538	
Energy Restoration Task Force Leader	Carlson, Brad	Husky Energy Inc.	218-390-5182	
Energy Restoration Task Force Leader	Massie, Nik	Husky Energy Inc.	715-817-1209	
<b>Resources Required</b>				
<b>Area Of Operation</b>	<b>Resource Kind</b>	<b>Description</b>	<b>Quantity</b>	<b>Size</b>
Energy Restoration Task Force	Manpower: Responder	Electricians	8	
Energy Restoration Task Force	Supervisor	Supervisor	2	
<b>Assignments</b>				
<p>1) Submit plan for energizing the following areas:</p> <ul style="list-style-type: none"> <li>- J Building Video recorder and associated fiber optic switches.</li> <li>- Plan to provide permanent power to VV building.</li> <li>- Plan to secure I building TAP.</li> <li>- Electrical plan to De-Inventory crude.</li> </ul> <p>2). Energize the following areas:</p> <ul style="list-style-type: none"> <li>- C building (Old wash slab, remove generator)</li> <li>- Marketing loading dock lighting</li> <li>- T building</li> </ul> <p>3) Disconnect high voltage to hot zone per the approved plan.</p> <p><b>**Prioritization changes to plans need to be approved by Operations Section Chief**</b></p> <p>Plans to be approved through normal refinery MOC process, Operations Section Chief and Incident Investigation Team (Shane Strang)</p>				
<b>Communications</b>				
<b>Name / Function</b>		<b>Contact Details</b>		
ERT Channel		8		
Channel 1 Talk Around		11		
Primary		1		
Secondary		2		
Radio		3 to 7		
<b>ICS 204 - Assignment List</b>			Updated 05/07/2018 17:10 UTC -6:00	
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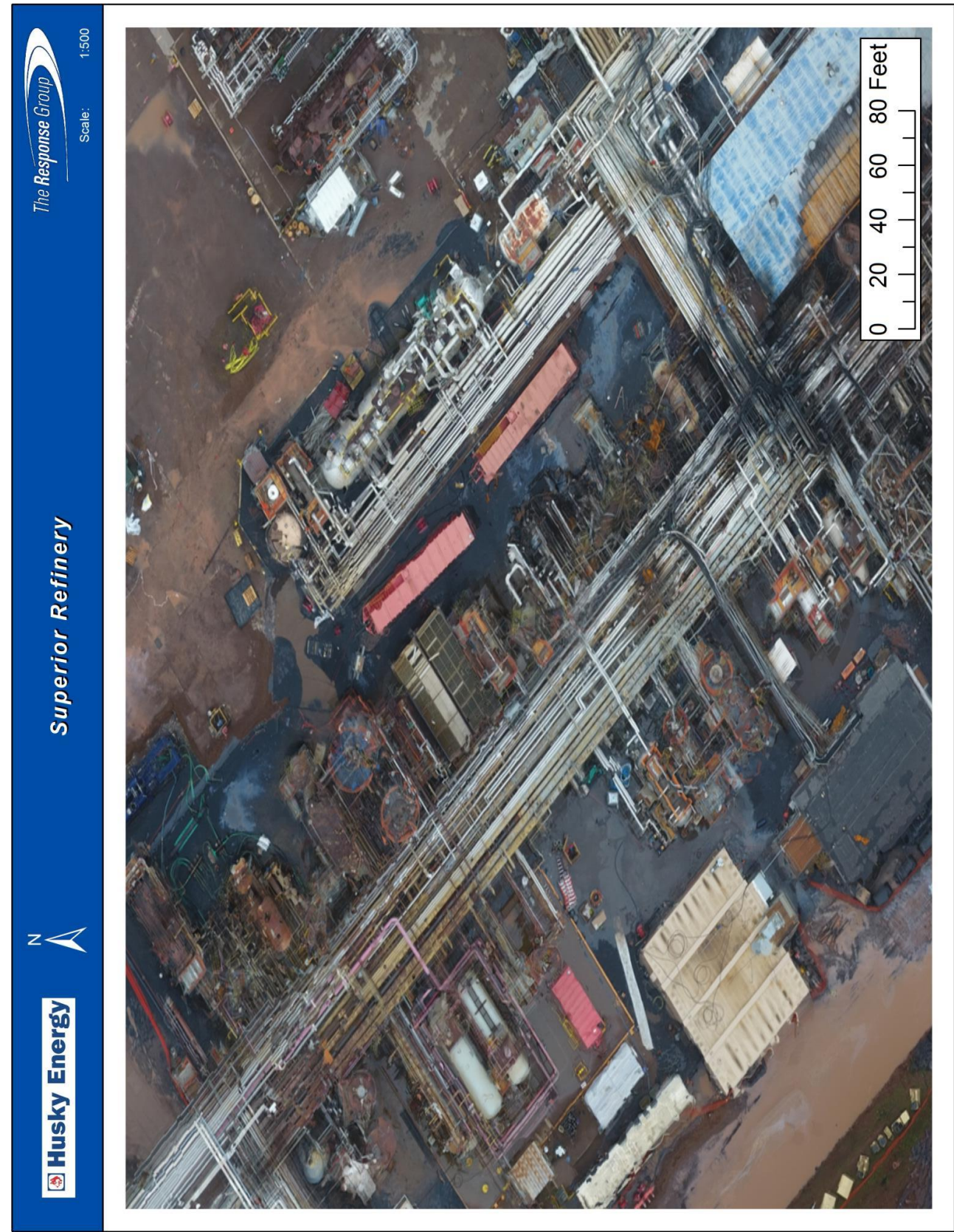
<b>ICS 204 - Assignment List</b>		Task Force: Energy Restoration Task Force	
Incident Name: 2018 Superior Refinery Fire		Period: Period 10 [05/19/2018 06:00 - 05/22/2018 06:00]	
<b>Special Environmental Considerations</b>			
<p>Considerations of potential hydrocarbon release should be made prior to energizing hydrocarbon containing equipment or their control system in order to minimize the release of hydrocarbons.</p> <p>Prior to energizing any CEM buildings all building analyzers and sampling equipment shall be turned off.</p> <p>Actions shall be taken to minimize any release of hydrocarbons to the environment. Any liquid hydrocarbon release shall be cleaned up immediately and disposed of properly.</p> <p>Notification of any venting/release of vapor/liquid hydrocarbon shall be made to the GHD air monitoring group immediately for consideration in air monitoring. Any liquid hydrocarbon release shall be cleaned up immediately.</p>			
<b>Special Site-Specific Safety Considerations</b>			
<p>If in Hot Zone, must follow Hot Zone Procedures. All other areas in the refinery require FR clothing, Hard Hat, Safety Glasses and safety boots. Refer to Permit writers for further guidance.</p> <p>A Safe Work Permit is required for all work. Safe Work Permits can be obtained in the ERT Building.</p> <p>Hazard assessment must be done to plan safe work.</p> <p>Follow Refinery Electrical Safety and Lockout Tagout programs.</p> <p>Be aware of your surroundings. There may be large equipment and overhead work in your area.</p> <p>Be cognizant of downed power lines, overhead hazards and potential for unintentional energization of electrical equipment.</p> <p>Wear PPE appropriate to the potential electrical energy.</p> <p>Emergency Alarm system will signal need to evacuate from the site.</p> <p>Use flashlights, vehicle lights and other lighting during nighttime activities. If warranted, request light plants and other larger lighting.</p> <p>For work in the hot zone or where damage has occurred to equipment, area must be assessed for asbestos and other hazardous materials by an Industrial Hygienist or a Wisconsin Licensed Asbestos personnel prior to their work. Safe work permit request must include request for this determination. Any concerns found as part of this assessment must be addressed prior to any work being done.</p> <p>Be aware of the potential for severe weather. In the refinery, the Shift Foreman will make an announcement on the plant radio system if there are special precautions or if there is a need to take shelter.</p>			
<b>Additional Information</b>			
<p>If impacted wildlife are observed. Do not approach or attempt to capture. Please contact Husky Hill Avenue guard shack at 715-398-8220 or 221</p>			
<b>ICS 204 - Assignment List</b>		Updated 05/07/2018 17:10 UTC -6:00	
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<b>ICS 204 - Assignment List</b>			Task Force: Control System Task Force	
Incident Name: 2018 Superior Refinery Fire			Period: Period 10 [05/19/2018 06:00 - 05/22/2018 06:00]	
<b>Operations Personnel</b>				
<b>Position</b>	<b>Name</b>	<b>Affiliation</b>	<b>Contact Number(s)</b>	<b>Work Shift</b>
Operations Section Chief	Fredman, Peter	Husky Energy Inc.	320-288-6161	
Deputy Operations Section Chief	Schade, Kollin	Husky Energy Inc.	317-292-6594	
Mechanical Group Supervisor	Rikkola, Ken	Husky Energy Inc.	218-343-9538	
Control System Task Force Leader	Johnson, Joe	Husky Energy Inc.	651-307-7833	
<b>Resources Required</b>				
<b>Area Of Operation</b>	<b>Resource Kind</b>	<b>Description</b>	<b>Quantity</b>	<b>Size</b>
Control System Task Force	Manpower: Responder	Electricians	1	
Control System Task Force	Manpower: Responder	Manpower: Responder	5	
<b>Assignments</b>				
Order fiber cable to connect old crude control room to "T" building – to support DCS connection when it is available.				
Develop plan to restore emergency response capabilities for BOHO DeltaV DCS control.				
Request permission from Investigation Task Force to utilize the DeltaV control system.				
<b>Special Environmental Considerations</b>				
Ensure that HF Air Monitoring is intergrated with GHD program.				
<b>Special Site-Specific Safety Considerations</b>				
If in Hot Zone, must follow Hot Zone Procedures including Bunker Gear, ERT escort, 4-Gas Monitor and sign in at ERT Response Center.				
In Alky Unit, fixed HF air monitors do not currently work. Rely on personal HF monitors and area monitors for determination of HF within the air.				
In Alky Unit, fixed water cannons are not operational. If there is a potential for a leak of HF Acid, stage water nozzles and verify antequate coverage of water spray to mitigate a release.				
If in Warm or Cold Zone, refinery PPE must be worn except where HF Akly Gear is required and that must be worn.				
Hazard assessment must be done to plan safe work.				
Be cognizant of the hazards of the products being handled including hydrofluoric acid and other hazards of the Alkylation Unit.				
Emergency Alarm system will signal need to evacuate from the site.				
Use flashlights, vehicle lights and other lighting during nighttime activities. If warranted, request light plants and other larger lighting.				
For work in the hot zone or where damage has occurred to equipment, area must be assessed for asbestos and other hazardous materials by an Industrial Hygienist or Wisconsin Licensed Asbestos personnel prior to their work. Safe work permit request must include request for this determination. Any concerns found as part of this assessment must be addressed prior to any work being done.				
Be aware of the potential for severe weather. In the refinery, the Shift Foreman will make an announcement on the plant radio system if there are special precautions or if there is a need to take shelter.				
<b>Additional Information</b>				
If impacted wildlife are observed. Do not approach or attempt to capture. Please contact Husky Hill Avenue guard shack at 715-398-8220 or 221				
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<b>ICS 204 - Assignment List</b>			Task Force: Asset Stabilization Task Force	
Incident Name: 2018 Superior Refinery Fire			Period: Period 10 [05/19/2018 06:00 - 05/22/2018 06:00]	
<b>Operations Personnel</b>				
<b>Position</b>	<b>Name</b>	<b>Affiliation</b>	<b>Contact Number(s)</b>	<b>Work Shift</b>
Operations Section Chief	Fredman, Peter	Husky Energy Inc.	320-288-6161	
Deputy Operations Section Chief	Schade, Kollin	Husky Energy Inc.	317-292-6594	
Mechanical Group Supervisor	Rikkola, Ken	Husky Energy Inc.	218-343-9538	
Asset Stabilization Task Force Leader	Rikkola, Ken	Husky Energy Inc.	218-343-9538	
<b>Resources Required</b>				
<b>Area Of Operation</b>	<b>Resource Kind</b>	<b>Description</b>	<b>Quantity</b>	<b>Size</b>
Asset Stabilization Task Force	Manpower: Responder	Manpower: Responder	16	
Asset Stabilization Task Force	Manpower: Operator	Manpower: Operator	2	
Asset Stabilization Task Force	Equipment: Heavy	Crane	2	
<b>Assignments</b>				
<p>Primary asset of concern for asset stabilization: Stripper tower (15G-V10)</p> <p>Actions for stripper tower stabilization:</p> <ul style="list-style-type: none"> <li>- Asphalt and Asbestos removal</li> <li>- 3D scan</li> </ul> <p>Continue identifying other assets of concern including building integrity issues.</p>				
<b>Communications</b>				
<b>Name / Function</b>	<b>Contact Details</b>			
ERT Channel	8			
Channel 1 Talk Around	11			
Primary	1			
Secondary	2			
Radio	3 to 7			
<b>Special Environmental Considerations</b>				
<p>Actions shall be taken to minimize any release of hydrocarbons to the environment. Any liquid hydrocarbon release shall be cleaned up immediately and disposed of properly.</p> <p>Once stabilization events commence, notification of any venting/release of vapor/liquid hydrocarbon shall be made to the GHD air monitoring group immediately for consideration in air monitoring. Actions shall be taken to minimize any release of hydrocarbons to the environment.</p> <p>Notification of any venting/release of vapor/liquid hydrocarbon shall be made to the GHD air monitoring group immediately for consideration in air monitoring.</p>				
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<b>ICS 204 - Assignment List</b>		Task Force: Asset Stabilization Task Force	
Incident Name: 2018 Superior Refinery Fire		Period: Period 10 [05/19/2018 06:00 - 05/22/2018 06:00]	
<b><i>Special Site-Specific Safety Considerations</i></b>			
<p>All contractors must be preapproved by Refinery Safety Department.</p> <p>If in Hot Zone, must follow Hot Zone Procedures. All other areas in the refinery require FR clothing, Hard Hat, Safety Glasses and safety boots. Refer to Permit writers for further guidance.</p> <p>A Safe Work Permit is required for all work. Safe Work Permits can be obtained in the ERT Building.</p> <p>Hazard assessment must be done to plan safe work.</p> <p>Be cognizant of the hazards of the product in the vessel, fire and similar hazards.</p> <p>Emergency Alarm system will signal need to evacuate from the site.</p> <p>Use flashlights, vehicle lights and other lighting during nighttime activities. If warranted, request lighth plants and other larger lighting.</p> <p>For work in the hot zone or where damage has occurred to equipment, area must be assessed for asbestos and other hazardous materials by an Industrial Hygienist or Wisconsin Licensed Asbestos personel prior to their work. Safe work permit request must include request for this determination. Any concerns found as part of this assessment must be addressed prior to any work being done.</p> <p>Be aware of the potential for severe weather. In the refinery, the Shift Foreman will make an announcement on the plant radio system if there are special precautions or if there is a need to take shelter.</p>			
<b><i>Additional Information</i></b>			
<p>If impacted wildlife are observed. Do not approach or attempt to capture. Please contact Husky Hill Avenue guard shack at 715-398-8220 or 221</p>			
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<b>ICS 204 - Assignment List</b>			Task Force: Asphalt Removal Task Force	
Incident Name: 2018 Superior Refinery Fire			Period: Period 10 [05/19/2018 06:00 - 05/22/2018 06:00]	
<b>Operations Personnel</b>				
<b>Position</b>	<b>Name</b>	<b>Affiliation</b>	<b>Contact Number(s)</b>	<b>Work Shift</b>
Operations Section Chief	Fredman, Peter	Husky Energy Inc.	320-288-6161	
Deputy Operations Section Chief	Schade, Kollin	Husky Energy Inc.	317-292-6594	
Mechanical Group Supervisor	Rikkola, Ken	Husky Energy Inc.	218-343-9538	
Asphalt Removal Task Force Leader	Stokes, Dave	Stack Brothers Mechanical	218-221-6427	
Asphalt Removal Task Force Leader	Linge, Jeremy	Husky Energy Inc.		
<b>Resources Required</b>				
<b>Area Of Operation</b>	<b>Resource Kind</b>	<b>Description</b>	<b>Quantity</b>	<b>Size</b>
Asphalt Removal Task Force	Manpower: Responder	Manpower: Responder	8	
Asphalt Removal Task Force	Front-end loader	Front-end loader	2	
Asphalt Removal Task Force	Manpower: Operator	Manpower: Operator	4	
Asphalt Removal Task Force	Roll Off Box	Roll Off Box	12	
Asphalt Removal Task Force	Vehicle	Roll Off Truck	2	
Asphalt Removal Task Force	Trackhoe	Trackhoe	1	
Asphalt Removal Task Force	Backhoe	Backhoe	1	
Asphalt Removal Task Force	Skid Steer	Skid Steer	1	
Asphalt Removal Task Force	Equipment: Heavy	Font-end Loader	2	
<b>Assignments</b>				
<p>Remove asphalt in priority areas as directed by operations and approved by Baker Risk</p> <p>Asphalt removal will be done by certified asbestos workers.</p> <p>Asbestos workers will implement "Asbestos Remediation Plan 2018 Superior Refinery Fire" that GHD produced</p> <p>Aerial mapping of progress is completed twice weekly. Updated maps will be provided by OSC.</p> <p>Prioritize the removal areas on a map per operations</p> <p><b>**Baker Risk needed for documentation and storage of evidence found**</b></p>				
<b>Special Environmental Considerations</b>				
<p>Follow existing waste management plan and approved by applicable agencies. Actions shall be taken to minimize any release of hydrocarbons to the environment. Any hydrocarbon release shall be cleaned up immediately and disposed of properly. Notification of any hydrocarbon release shall be made to the GHD air monitoring group immediately for consideration in air monitoring.</p>				
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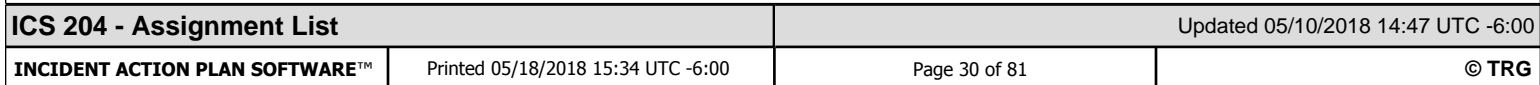
<b>ICS 204 - Assignment List</b>		Task Force: Asphalt Removal Task Force	
Incident Name: 2018 Superior Refinery Fire		Period: Period 10 [05/19/2018 06:00 - 05/22/2018 06:00]	
<b>Special Site-Specific Safety Considerations</b>			
<p>If in Hot Zone, must follow Hot Zone Procedures. All other areas in the refinery require FR clothing, Hard Hat, Safety Glasses and safety boots. In addition, Tingley or other chemical boots and leather gloves must be worn when there is a potential for contact with asphalt. Refer to Permit writers for further guidance.</p> <p>A Safe Work Permit is required for all work. Safe Work Permits can be obtained in the ERT Building.</p> <p>Hazard assessment must be done to plan safe work.</p> <p>Any disturbance of Presumed Asbestos Containing Materials must be done by asbestos licensed personnel.</p> <p>Be cognizant of the hazards of the areas that you are working in. Certain areas, such as the HF Unit, may require additional PPE.</p> <p>Emergency Alarm system will signal need to evacuate from the site.</p> <p>Use flashlights, vehicle lights and other lighting during nighttime activities. If warranted, request light plants and other larger lighting.</p> <p>For work in the hot zone or where damage has occurred to equipment, area must be assessed for asbestos and other hazardous materials by an Industrial Hygienist or Wisconsin Licensed Asbestos personnel prior to their work. Safe work permit request must include request for this determination. Any concerns found as part of this assessment must be addressed prior to any work being done.</p> <p>Be aware of the potential for severe weather. In the refinery, the Shift Foreman will make an announcement on the plant radio system if there are special precautions or if there is a need to take shelter.</p>			
<b>Additional Information</b>			
<p>If impacted wildlife are observed. Do not approach or attempt to capture. Please contact Husky Hill Avenue guard shack at 715-398-8220 or 221</p>			
<b>ICS 204 - Assignment List</b>		Updated 05/08/2018 15:40 UTC -6:00	
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<b>ICS 204 - Assignment List</b>			Task Force: Inspection Task Force	
Incident Name: 2018 Superior Refinery Fire			Period: Period 10 [05/19/2018 06:00 - 05/22/2018 06:00]	
<b>Operations Personnel</b>				
<b>Position</b>	<b>Name</b>	<b>Affiliation</b>	<b>Contact Number(s)</b>	<b>Work Shift</b>
Operations Section Chief	Fredman, Peter	Husky Energy Inc.	320-288-6161	
Deputy Operations Section Chief	Schade, Kollin	Husky Energy Inc.	317-292-6594	
Mechanical Group Supervisor	Rikkola, Ken	Husky Energy Inc.	218-343-9538	
Inspection Task Force Leader	Debevc, Ed	Husky Energy Inc.	250-961-2357	
Inspection Task Force Leader	Johnston, Gary	Husky Energy Inc.	715-817-1131	
<b>Resources Required</b>				
<b>Area Of Operation</b>	<b>Resource Kind</b>	<b>Description</b>	<b>Quantity</b>	<b>Size</b>
Inspection Task Force	Manpower: Responder	Manpower: Responder	10	
<b>Assignments</b>				
<p>1) Primary focus on the Crude Vac unit addressing the following areas.</p> <p>Engineering Drawings</p> <ul style="list-style-type: none"> <li>- Assemble engineering package</li> <li>- Assemble database and baseline information</li> </ul> <p>2) Work ahead of De-Inventory assignments to conduct visual assessment of additional equipment outside the known event areas.</p> <p>3) Perform mechanical integrity analysis on structures identified by the Investigation Task Force.</p> <p><b>**Plan to be approved by Safety Officer, Operations Section Chief, Investigation Task Force Leader, Planning Section Chief and Incident Commander**</b></p>				
<b>Special Environmental Considerations</b>				
<p>Actions shall be taken to minimize any release of hydrocarbons to the environment. Any liquid hydrocarbon release shall be cleaned up immediately and disposed of properly.</p> <p>Notification of any venting/release of vapor/liquid hydrocarbon shall be made to the GHD air monitoring group immediately for consideration in air monitoring.</p>				
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<b>ICS 204 - Assignment List</b>		Task Force: Inspection Task Force	
Incident Name: 2018 Superior Refinery Fire		Period: Period 10 [05/19/2018 06:00 - 05/22/2018 06:00]	
<b><i>Special Site-Specific Safety Considerations</i></b>			
<p>If in Hot Zone, must follow Hot Zone Procedures including Bunker Gear, ERT escort, 4-Gas Monitor and sign in at ERT Response Center.</p> <p>All other areas in the refinery require FR clothing, Hard Hat, Safety Glasses and safety boots. Refer to Permit writers for further guidance.</p> <p>A Safe Work Permit is required for all work. Safe Work Permits can be obtained in the ERT Building.</p> <p>Hazard assessment must be done to plan safe work.</p> <p>Be cognizant of the hazards of the product in reactor as well as nitrogen, fire and similar hazards.</p> <p>Use flashlights, vehicle lights and other lighting during nighttime activities. If warranted, request light plants and other larger lighting.</p> <p>Emergency Alarm system will signal need to evacuate from the site. Secondary alarm is via the Channel 1 on plant radio.</p> <p>For work in the hot zone or where damage has occurred to equipment, area must be assessed for asbestos and other hazardous materials by an Industrial Hygienist or Wisconsin Licensed Asbestos personnel prior to their work. Safe work permit request must include request for this determination. Any concerns found as part of this assessment must be addressed prior to any work being done.</p> <p>Be aware of the potential for severe weather. The Shift Foreman will make an announcement if there are special precautions or if there is a need to take shelter.</p>			
<b><i>Additional Information</i></b>			
<p>If impacted wildlife are observed. Do not approach or attempt to capture. Please contact Husky Hill Avenue guard shack at 715-398-8220 or 221</p>			
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<b>ICS 204 - Assignment List</b>		Updated 05/10/2018 14:17 UTC -6:00	
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<b>ICS 204 - Assignment List</b>			Task Force: ERT Task Force	
Incident Name: 2018 Superior Refinery Fire			Period: Period 10 [05/19/2018 06:00 - 05/22/2018 06:00]	
<b>Operations Personnel</b>				
<b>Position</b>	<b>Name</b>	<b>Affiliation</b>	<b>Contact Number(s)</b>	<b>Work Shift</b>
Operations Section Chief	Fredman, Peter	Husky Energy Inc.	320-288-6161	
Deputy Operations Section Chief	Schade, Kollin	Husky Energy Inc.	317-292-6594	
Emergency Response Group Supervisor	Quimby, Jerome	Husky Energy Inc.	218-428-5190	
ERT Task Force Leader	Hunker, Johnny	Husky Energy Inc.		
ERT Task Force Leader	VanHornweder, Brian	Husky Energy Inc.	218-428-5210	
<b>Resources Required</b>				
<b>Area Of Operation</b>	<b>Resource Kind</b>	<b>Description</b>	<b>Quantity</b>	<b>Size</b>
ERT Task Force	Fire Fighting Foam	Fire Fighting Foam	1500	
ERT Task Force	Tanker Truck	Tanker Truck	1	
ERT Task Force	Foam pumper	Foam pumper	1	
ERT Task Force	Manpower: Responder	Manpower: Responder	20	
<b>Assignments</b>				
<p>Maintain 24hr readiness to respond to any incidents on-site. Follow guidelines as defined in existing Superior Refinery Emergency Response Plan.</p> <p>Deploy and maintain fire response to support de-inventorying activities.</p> <p>See attached map for warm and hot zone locations.</p> <p>Equipment manager for ERT will ensure serviceability and organization of ERT building and equipment</p>				
<b>Communications</b>				
<b>Name / Function</b>	<b>Contact Details</b>			
ERT Channel	8			
Channel 1 Talk Around	11			
Primary	1			
Secondary	2			
Radio	3 to 7			
<b>Special Environmental Considerations</b>				
<p>Actions shall be taken to minimize any release of hydrocarbons to the environment. Any liquid hydrocarbon release shall be cleaned up immediately and disposed of properly.</p> <p>Notification of any venting/release of vapor/liquid hydrocarbon shall be made to the GHD air monitoring group immediately for consideration in air monitoring.</p>				
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<b>ICS 204 - Assignment List</b>			Task Force: Fire Pump Task Force	
Incident Name: 2018 Superior Refinery Fire			Period: Period 10 [05/19/2018 06:00 - 05/22/2018 06:00]	
<b>Operations Personnel</b>				
<b>Position</b>	<b>Name</b>	<b>Affiliation</b>	<b>Contact Number(s)</b>	<b>Work Shift</b>
Operations Section Chief	Fredman, Peter	Husky Energy Inc.	320-288-6161	
Deputy Operations Section Chief	Schade, Kollin	Husky Energy Inc.	317-292-6594	
Emergency Response Group Supervisor	Quimby, Jerome	Husky Energy Inc.	218-428-5190	
Fire Pump Task Force Leader	Peterson, John	Husky Energy Inc.	218-428-6160	
<b>Resources Required</b>				
<b>Area Of Operation</b>	<b>Resource Kind</b>	<b>Description</b>	<b>Quantity</b>	<b>Size</b>
Fire Pump Task Force	Manpower: Responder	Manpower: Responder	3	
Fire Pump Task Force	Pumps	Fire Pumps	3	
<b>Assignments</b>				
Maintain operational readiness of fire water pumps. Report any issues to the Emergency Response Group Supervisor.				
<b>Communications</b>				
<b>Name / Function</b>		<b>Contact Details</b>		
ERT Channel		8		
Channel 1 Talk Around		11		
Primary		1		
Secondary		2		
Radio		3 to 7		
<b>Special Environmental Considerations</b>				
Release of diesel fuel at the diesel fire water pumps shall be properly cleaned up immediately for proper disposal. Actions shall be taken to minimize any release of hydrocarbons to the environment.				
Notification of any venting/release of vapor/liquid hydrocarbon shall be made to the GHD air monitoring group immediately for consideration in air monitoring.				
<b>Special Site-Specific Safety Considerations</b>				
Refinery require FR clothing, Hard Hat, Safety Glasses and safety boots.				
If in Diesel Pump building and pumps are running, hearing protection must be worn.				
If working along the pond perimeter, a life jacket must be worn.				
Emergency Alarm system will signal need to evacuate from the site.				
Use flashlights, vehicle lights and other lighting during nighttime activities. If warranted, request light plants and other larger lighting.				
Be aware of the potential for severe weather. In the refinery, the Shift Foreman will make an announcement on the plant radio system if there are special precautions or if there is a need to take shelter.				
<b>Additional Information</b>				
If impacted wildlife are observed. Do not approach or attempt to capture. Please contact Husky Hill Avenue guard shack at 715-398-8220 or 221				
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<b>ICS 204 - Assignment List</b>			Task Force: Air Monitoring Task Force	
Incident Name: 2018 Superior Refinery Fire			Period: Period 10 [05/19/2018 06:00 - 05/22/2018 06:00]	
<b>Operations Personnel</b>				
<b>Position</b>	<b>Name</b>	<b>Affiliation</b>	<b>Contact Number(s)</b>	<b>Work Shift</b>
Operations Section Chief	Fredman, Peter	Husky Energy Inc.	320-288-6161	
Deputy Operations Section Chief	Schade, Kollin	Husky Energy Inc.	317-292-6594	
Environmental Monitoring Group Supervisor	Beattie, Dave	Husky Energy Inc.	218-348-9051	
Air Monitoring Task Force Leader	Armes, Will	GHD	519-497-8054	
<b>Resources Required</b>				
<b>Area Of Operation</b>	<b>Resource Kind</b>	<b>Description</b>	<b>Quantity</b>	<b>Size</b>
Air Monitoring Task Force	Equipment: Air Monitoring	AreaRaes	32	
Air Monitoring Task Force	Equipment: Air Monitoring	MultiRaes	10	
Air Monitoring Task Force	Equipment: Air Monitoring	UltraRaes	10	
Air Monitoring Task Force	Equipment: Air Monitoring	Dust Track	10	
Air Monitoring Task Force	Manpower: Operator	Air Monitoring Supervisors	2	
Air Monitoring Task Force	Manpower: Responder	Industrial Hygienist	25	
Air Monitoring Task Force	Manpower: Responder	Asbestos Contractors	1	
<b>Assignments</b>				
<p>1. Continue to maintain a fixed perimeter air monitoring system that has been deployed to the area currently delineated as the hot zone. This monitoring will be conducted in accordance with the Site action levels described in the Air Monitoring Plan</p> <p>2. Continue to maintain a fixed perimeter air monitoring system that has deployed to the perimeter of the refinery process area at or near the fenceline. This monitoring will be used to provide information regarding air quality in close proximity to potential sources of emissions of COI during the cleanup and recovery phases of the project.</p> <p>3. Mobile community monitoring teams will continue to conduct monitoring in the area outside the facility, with a focus on downwind monitoring, while the cleanup and recovery phases of the project are ongoing.</p> <p>4. Mobile on site teams will continue to conduct monitoring during De-Inventory activities.</p>				
<b>Communications</b>				
<b>Name / Function</b>		<b>Contact Details</b>		
ERT Channel		8		
Channel 1 Talk Around		11		
Primary		1		
Secondary		2		
Radio		3 to 7		
<b>Special Environmental Considerations</b>				
<p>Actions shall be taken to minimize any release of hydrocarbons to the environment. Any liquid hydrocarbon release shall be cleaned up immediately and disposed of properly.</p> <p>Notification of any venting/release of vapor/liquid hydrocarbon shall be made to the GHD air monitoring group immediately for consideration in air monitoring.</p>				
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<b>ICS 204 - Assignment List</b>		Task Force: Air Monitoring Task Force	
Incident Name: 2018 Superior Refinery Fire		Period: Period 10 [05/19/2018 06:00 - 05/22/2018 06:00]	
<b><i>Special Site-Specific Safety Considerations</i></b>			
<p>If in Hot Zone, must follow Hot Zone Procedures. All other areas in the refinery require FR clothing, Hard Hat, Safety Glasses and safety boots. Refer to Permit writers for further guidance.</p> <p>A Safe Work Permit is required for all work. Safe Work Permits can be obtained in the ERT Building.</p> <p>If working along the perimeter fence or other Husky property outside of refinery, contact security guards at 715-398-8220 to make them aware of your presence. Otherwise, the police will be called.</p> <p>When working along the refinery perimeter, be cognizant of slip, trip and fall hazards.</p> <p>Use flashlights, vehicle lights and other lighting during nighttime activities. If warranted, request light plants and other larger lighting.</p> <p>Emergency Alarm system will signal need to evacuate from the site.</p> <p>When leaving vegetated areas outside of refinery, visually inspect clothing and skin for ticks.</p> <p>For work in the hot zone or where damage has occurred to equipment, area must be assessed for asbestos and other hazardous materials by an Industrial Hygienist or Wisconsin Licensed Asbestos personnel prior to their work. Safe work permit request must include request for this determination. Any concerns found as part of this assessment must be addressed prior to any work being done.</p> <p>Be aware of the potential for severe weather. In the refinery, the Shift Foreman will make an announcement on the plant radio system if there are special precautions or if there is a need to take shelter.</p>			
<b><i>Additional Information</i></b>			
<p>If impacted wildlife are observed. Do not approach or attempt to capture. Please contact Husky Hill Avenue guard shack at 715-398-8220 or 221</p>			
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## ICS 204 - Assignment List

Task Force: Air Monitoring Task Force

Incident Name: 2018 Superior Refinery Fire
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Period: Period 10 [05/19/2018 06:00 - 05/22/2018 06:00]
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## ICS 204 - Assignment List

Updated 05/10/2018 11:38 UTC -6:00

<b>ICS 204 - Assignment List</b>			Task Force: Water Sampling Task Force	
Incident Name: 2018 Superior Refinery Fire			Period: Period 10 [05/19/2018 06:00 - 05/22/2018 06:00]	
<b>Operations Personnel</b>				
<b>Position</b>	<b>Name</b>	<b>Affiliation</b>	<b>Contact Number(s)</b>	<b>Work Shift</b>
Operations Section Chief	Fredman, Peter	Husky Energy Inc.	320-288-6161	
Deputy Operations Section Chief	Schade, Kollin	Husky Energy Inc.	317-292-6594	
Environmental Monitoring Group Supervisor	Beattie, Dave	Husky Energy Inc.	218-348-9051	
Water Sampling Task Force Leader	Turner, Matt	Husky Energy Inc.	715-969-4873	
<b>Resources Required</b>				
<b>Area Of Operation</b>	<b>Resource Kind</b>	<b>Description</b>	<b>Quantity</b>	<b>Size</b>
Water Sampling Task Force	Miscellaneous	Long-Handled Surface water Sampler	4	
Water Sampling Task Force	Miscellaneous	Lab Sample Containers	24	
Water Sampling Task Force	Miscellaneous	Water-Proof Shipping Containers	4	
Water Sampling Task Force	Manpower: Responder	Water Sampling Techs	3	
<b>Assignments</b>				
<p>Water sampling to be conducted once per week as directed by the Water Sampling Task Force Leader. When sampling occurs, the following will take place:</p> <ol style="list-style-type: none"> <li>1. Continue to collect water samples at designated sites utilizing appropriate water sampling equipment and techniques.</li> <li>2. Sample at Four (4) pre-determined locations off site</li> <li>3. Package and arrange water samples for delivery to selected labs for analysis.</li> <li>4. Report findings to EUL and GHD.</li> <li>5. Conduct on-site sampling for PFAS as needed.</li> </ol>				
<b>Communications</b>				
<b>Name / Function</b>		<b>Contact Details</b>		
ERT Channel		8		
Channel 1 Talk Around		11		
Primary		1		
Secondary		2		
Radio		3 to 7		
<b>Special Environmental Considerations</b>				
<p>Follow existing water sampling plan developed by GHD and approved by applicable agencies. All precautions should be taken to ensure proper sampling and handling. Actions shall be taken to minimize any release of hydrocarbons to the environment. Any liquid hydrocarbon release shall be cleaned up immediately and disposed of properly.</p> <p>Notification of any venting/release of vapor/liquid hydrocarbon shall be made to the GHD air monitoring group immediately for consideration in air monitoring. Any liquid hydrocarbon release shall be cleaned up immediately.</p>				
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<b>ICS 204 - Assignment List</b>		Task Force: Water Sampling Task Force	
Incident Name: 2018 Superior Refinery Fire		Period: Period 10 [05/19/2018 06:00 - 05/22/2018 06:00]	
<b>Special Site-Specific Safety Considerations</b>			
<p>Please refer to GHD Health and Safety Plan for water sampling.</p> <p>Emergency Alarm system will signal need to evacuate from the site.</p> <p>Use flashlights, vehicle lights and other lighting during nighttime activities. If warranted, request lighth plants and other larger lighting.</p> <p>Life jackets are required when working over water. Life jackets are available in the Warehouse.</p> <p>For work in the hot zone or where damage has occurred to equipment, area must be assessed for asbestos and other hazardous materials by an Industrial Hygienist or Wisconsin Licensed Asbestos personel prior to their work. Safe work permit request must include request for this determination. Any concerns found as part of this assessment must be addressed prior to any work being done.</p> <p>Be aware of the potential for severe weather. In the refinery, the Shift Foreman will make an announcement on the plant radio system if there are special precautions or if there is a need to take shelter.</p>			
<b>Additional Information</b>			
<p>If impacted wildlife are observed. Do not approach or attempt to capture. Please contact Husky Hill Avenue guard shack at 715-398-8220 or 221</p>			
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<b>ICS 204 - Assignment List</b>			Task Force: IH Monitoring Task Force	
Incident Name: 2018 Superior Refinery Fire			Period: Period 10 [05/19/2018 06:00 - 05/22/2018 06:00]	
<b>Operations Personnel</b>				
<b>Position</b>	<b>Name</b>	<b>Affiliation</b>	<b>Contact Number(s)</b>	<b>Work Shift</b>
Operations Section Chief	Fredman, Peter	Husky Energy Inc.	320-288-6161	
Deputy Operations Section Chief	Schade, Kollin	Husky Energy Inc.	317-292-6594	
Environmental Monitoring Group Supervisor	Beattie, Dave	Husky Energy Inc.	218-348-9051	
IH Monitoring Task Force Supervisor	Thiel, Jason	Husky Energy Inc.	419-296-6310	
<b>Resources Required</b>				
<b>Area Of Operation</b>	<b>Resource Kind</b>	<b>Description</b>	<b>Quantity</b>	<b>Size</b>
IH Monitoring Task Force	Manpower: Responder	Industrial Hygienist	2	
IH Monitoring Task Force	Pumps	Sampling Pumps	5	
IH Monitoring Task Force	Manpower: Responder	Asbestos Contractors	12	
<b>Assignments</b>				
Continue asbestos monitoring on-site as directed by approved Asbestos Plan				
Personal monitoring for air contaminants. (VOC, Asbestos)				
Provide asbestos hazard support to ERT and on-site operations within the hot zone or other areas where insulation is damaged.				
<b>Communications</b>				
<b>Name / Function</b>		<b>Contact Details</b>		
ERT Channel		8		
Channel 1 Talk Around		11		
Primary		1		
Secondary		2		
Radio		3 to 7		
<b>Special Environmental Considerations</b>				
Debris shall be assumed to be asbestos containing unless testing or other means of identification confirms otherwise. Actions shall be taken to minimize any release of presumed asbestos containing materials (PACM) to the environment. Any PACM disturbance/release/exposure shall be mitigated or cleaned up immediately and disposed of properly. Notification of any PACM activities shall be made to the GHD IH air monitoring group immediately for evaluation, mitigation and/or exclusion.				
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<b>ICS 204 - Assignment List</b>		Task Force: IH Monitoring Task Force	
Incident Name: 2018 Superior Refinery Fire		Period: Period 10 [05/19/2018 06:00 - 05/22/2018 06:00]	
<b>Special Site-Specific Safety Considerations</b>			
<p>If in Hot Zone, must follow Hot Zone Procedures. All other areas in the refinery require FR clothing, Hard Hat, Safety Glasses and safety boots. Refer to Permit writers for further guidance.</p> <p>A Safe Work Permit is required for all work. Safe Work Permits can be obtained in the ERT Building.</p> <p>If working along the perimeter fence or other Husky property outside of refinery, contact security guards at 715-398-8220 to make them aware of your presence. Otherwise, the police will be called.</p> <p>When in the refinery, be cognizant of hazards associated with a fire zone.</p> <p>When working along the refinery perimeter, be cognizant of slip, trip and fall hazards.</p> <p>Use flashlights, vehicle lights and other lighting during nighttime activities. If warranted, request light plants and other larger lighting.</p> <p>Emergency Alarm system will signal need to evacuate from the site.</p> <p>For work in the hot zone or where damage has occurred to equipment, area must be assessed for asbestos and other hazardous materials by an Industrial Hygienist or Wisconsin Licensed Asbestos personnel prior to their work. Safe work permit request must include request for this determination. Any concerns found as part of this assessment must be addressed prior to any work being done.</p> <p>Be aware of the potential for severe weather. In the refinery, the Shift Foreman will make an announcement on the plant radio system if there are special precautions or if there is a need to take shelter.</p>			
<b>Additional Information</b>			
<p>If impacted wildlife are observed. Do not approach or attempt to capture. Please contact Husky Hill Avenue guard shack at 715-398-8220 or 221</p>			
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<b>ICS 204 - Assignment List</b>		Updated 05/07/2018 17:18 UTC -6:00	
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<b>ICS 204 - Assignment List</b>			Task Force: Environmental Support Task Force	
Incident Name: 2018 Superior Refinery Fire			Period: Period 10 [05/19/2018 06:00 - 05/22/2018 06:00]	
<b>Operations Personnel</b>				
<b>Position</b>	<b>Name</b>	<b>Affiliation</b>	<b>Contact Number(s)</b>	<b>Work Shift</b>
Operations Section Chief	Fredman, Peter	Husky Energy Inc.	320-288-6161	
Deputy Operations Section Chief	Schade, Kollin	Husky Energy Inc.	317-292-6594	
Environmental Monitoring Group Supervisor	Beattie, Dave	Husky Energy Inc.	218-348-9051	
Environmental Support Task Force Leader	Turner, Matt	Husky Energy Inc.	715-969-4873	
<b>Resources Required</b>				
<b>Area Of Operation</b>	<b>Resource Kind</b>	<b>Description</b>	<b>Quantity</b>	<b>Size</b>
Environmental Support Task Force	Manpower: Responder	Manpower: Responder	3	
Environmental Support Task Force	Boom	Boom	400	
Environmental Support Task Force	Sorbent: Boom	Sorbent: Boom	400	
Environmental Support Task Force	Vehicle	Vehicle	4	
Environmental Support Task Force	Vacuum Truck	Vacuum Truck	1	
Environmental Support Task Force	Manpower: Operator	Vac Truck Operators	2	
Environmental Support Task Force	Manpower: Operator	Operator	1	
Environmental Support Task Force	Excavator	Mini Excavator	1	
<b>Assignments</b>				
<p>Boom Maintenance:</p> <p>The team will travel to the current boom sites along Newton Creek to assess the condition of the boom. The morning crew will replace all absorbent boom that appears to have petroleum contamination. Any containment boom that is compromised will be put into 55 gallon steel drums that are labeled with a non-hazardous waste label filled in with "Oily Absorbent Booms". Full drums will be brought to the 90 day storage building. Pictures of each boom site should be taken both before and after any upkeep for documentation. Report to acting shift foreman for any additional work he may have for them.</p> <p>Respond to any immediate actions, environmental concerns. (ie: Cleanup of contaminants at boom locations, address contamination issues at stinson avenue) as directed by Environmental Support Task Force Leader</p>				
<b>Communications</b>				
<b>Name / Function</b>		<b>Contact Details</b>		
Primary		1		
Secondary		2		
Radio		3 to 7		
ERT Channel		8		
Channel 1 Talk Around		11		
Channel 2 Talk Around		12		
<b>Special Equipment / Supplies Needed for Assignment</b>				
Steel Drums, wheelbarrow				
<b>Special Environmental Considerations</b>				
<p>Presence of sheen/oil at any location shall be relayed to the boom maintenance task force leader. Actions shall be taken to minimize any release of hydrocarbons to the environment. Any liquid hydrocarbon release shall be cleaned up immediately and disposed of properly.</p> <p>Notification of any venting/release of vapor/liquid hydrocarbon shall be made to the GHD air monitoring group immediately for consideration in air monitoring.</p>				
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<b>ICS 204 - Assignment List</b>		Task Force: Environmental Support Task Force	
Incident Name: 2018 Superior Refinery Fire		Period: Period 10 [05/19/2018 06:00 - 05/22/2018 06:00]	
<b><i>Special Site-Specific Safety Considerations</i></b>			
<p>Be aware of slipping hazards on sides of banks of creek and other areas.</p> <p>If in Hot Zone, must follow Hot Zone Procedures. All other areas in the refinery require FR clothing, Hard Hat, Safety Glasses and safety boots. Refer to Permit writers for further guidance.</p> <p>A Safe Work Permit is required for all work. Safe Work Permits can be obtained in the ERT Building.</p> <p>When work involves roadways, utilize Hi Viz vest.</p> <p>Wear a life jacket when working in areas of deeper water. Consider slipping hazards and what might happen if you were to slip into creek while deploying boom or into pond while sampling.</p> <p>Be cognizant of the products being handled.</p> <p>Utilize proper lifting techniques and utilize mechanical lifting techniques on heavy boom or other objects.</p> <p>Inspect for ticks when traveling in grassy or wooded areas.</p> <p>Use flashlights, vehicle lights and other lighting during nighttime activities. If warranted, request light plants and other larger lighting.</p> <p>For work in the hot zone or where damage has occurred to equipment, area must be assessed for asbestos and other hazardous materials by an Industrial Hygienist or Wisconsin Licensed Asbestos personnel prior to their work. Safe work permit request must include request for this determination. Any concerns found as part of this assessment must be addressed prior to any work being done.</p>			
<b><i>Additional Information</i></b>			
<p>If impacted wildlife are observed. Do not approach or attempt to capture. Please contact Husky Hill Avenue guard shack at 715-398-8220 or 221</p>			
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## Asphalt Recovery and Boom Management Plan

Crew: 2 shifts, 2 workers each shift. Workers must have current HAZWOPER Training

Frequency: Twice per day (once per shift) for a week

Materials: Containment Boom (100ft)  
Absorbent Boom (100ft)  
55 gallon steel drums (4)  
Non-Hazardous Waste Labels (4)  
Shovels (2)  
Wheelbarrow (1)  
Pickup Truck (1)  
Boom Location Map (1)  
High Visibility Vest for Worker (2)

Objective: **Stinson Ave Ditch Asphalt Recovery:** Teams of two with current HAZWOPER training will travel along the northern side of Stinson Ave and collect any asphalt present. Asphalt may appear in “globs” with sizes ranging from a softball to a pea. Collected asphalt can be placed in a wheelbarrow while traversing Stinson Ave and ultimately transferred into 55 gallon steel drums. The drums are to be labeled with a non-hazardous waste sticker that is filled in with “Asphalt + Soil”. Under no circumstances should any other material be collected as to not interfere with the incident investigation. Full drums will be brought to the 90 day storage building and properly stored. Pictures of gross asphalt contamination should be taken for documentation purposes.

**Newton Creek Boom Maintenance:** After conducting the asphalt recovery portion of the plan, the same team of two will travel to the current boom sites along Newton Creek to assess the condition of the booms. The morning crew will replace all the absorbent boom in the creek. The afternoon crew will replace any absorbent boom that appears to have petroleum contamination. Any containment boom that is compromised should be replaced or adjusted to ensure functionality. Spent absorbent booms will be put into 55 gallon steel drums that are labeled with a non-hazardous waste label that is filled in with “Oily Absorbent Booms”. Full drums will be brought to the 90 day storage building and properly stored. Pictures of each boom site should be taken both before and after any upkeep for documentation purposes.

**After Both Tasks Are Complete:** Once the tasks have been completed, the team will then contact the acting shift foreman for any additional work he may have for them.

<b>ICS 204 - Assignment List</b>			Task Force: Wildlife Task Force	
Incident Name: 2018 Superior Refinery Fire			Period: Period 10 [05/19/2018 06:00 - 05/22/2018 06:00]	
<b>Operations Personnel</b>				
<b>Position</b>	<b>Name</b>	<b>Affiliation</b>	<b>Contact Number(s)</b>	<b>Work Shift</b>
Operations Section Chief	Fredman, Peter	Husky Energy Inc.	320-288-6161	
Deputy Operations Section Chief	Schade, Kollin	Husky Energy Inc.	317-292-6594	
Environmental Monitoring Group Supervisor	Beattie, Dave	Husky Energy Inc.	218-348-9051	
Wildlife Task Force Leader	Battaglia, Chris	Focus Wildlife	310-386-5965	
<b>Resources Required</b>				
<b>Area Of Operation</b>	<b>Resource Kind</b>	<b>Description</b>	<b>Quantity</b>	<b>Size</b>
Wildlife Task Force	Manpower: Responder	Manpower: Responder	3	
<b>Assignments</b>				
<p>Minimize access to asphalt tank farm by installing fencing (chain link &amp; silt fence), continue to clean up and maintain penant &amp; mylar flagging around all of the asphalt and 6 oil containment area.</p> <p>Implement canadian goose nest and egg depredation as defined in the wildlife plan.</p> <p>Implement active wildlife hazing as appropriate.</p> <p>Continuous active monitoring of wildlife on-site and off-site around the facility</p> <p>All operations should be in accordance with the approved Wildlife Plan.</p> <p>Active wildlife rehabilitation.</p>				
<b>Special Equipment / Supplies Needed for Assignment</b>				
100yd sand Pre-sectioned mobile fencing PFD Flagging material				
<b>Special Environmental Considerations</b>				
Follow existing wildlife management plan and approved by applicable agencies. Actions shall be taken to minimize any impact to wildlife. Notification to the Wildlife Group and Environmenal Unit Leader of any identified impacts to wildlife (terrestrial, aquatic, avian). Additionally, notification of any hydrocarbon release shall be made to the GHD air monitoring group immediately for consideration in air monitoring.				
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<b>ICS 204 - Assignment List</b>		Task Force: Wildlife Task Force	
Incident Name: 2018 Superior Refinery Fire		Period: Period 10 [05/19/2018 06:00 - 05/22/2018 06:00]	
<b>Special Site-Specific Safety Considerations</b>			
<p>If in Hot Zone, must follow Hot Zone Procedures. All other areas in the refinery require FR clothing, Hard Hat, Safety Glasses and safety boots. Refer to Permit writers for further guidance.</p> <p>Be cognizant of the hazards of the products being handled.</p> <p>If working along the perimeter fence or other Husky property outside of refinery, contact security guards at 715-398-8220 to make them aware of your presence. Otherwise, the police will be called.</p> <p>When working along the refinery perimeter, be cognizant of slip, trip and fall hazards.</p> <p>Use flashlights, vehicle lights and other lighting during nighttime activities. If warranted, request light plants and other larger lighting.</p> <p>Emergency Alarm system will signal need to evacuate from the site.</p> <p>For work in the hot zone or where damage has occurred to equipment, area must be assessed for asbestos and other hazardous materials by an Industrial Hygienist or Wisconsin Licensed Asbestos personnel prior to their work. Safe work permit request must include request for this determination. Any concerns found as part of this assessment must be addressed prior to any work being done.</p> <p>Be sure to wear a life jacket when working over water. Life jackets are available in the Warehouse.</p> <p>Inspect for ticks when traveling in grassy or wooded areas.</p> <p>Be aware of the potential for severe weather. In the refinery, the Shift Foreman will make an announcement on the plant radio system if there are special precautions or if there is a need to take shelter.</p>			
<b>Additional Information</b>			
<p>If impacted wildlife are observed. Do not approach or attempt to capture. Please contact Husky Hill Avenue guard shack at 715-398-8220 or 221</p>			
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<b>ICS 204 - Assignment List</b>			Task Force: Waste Management Task Force	
Incident Name: 2018 Superior Refinery Fire			Period: Period 10 [05/19/2018 06:00 - 05/22/2018 06:00]	
<b>Operations Personnel</b>				
<b>Position</b>	<b>Name</b>	<b>Affiliation</b>	<b>Contact Number(s)</b>	<b>Work Shift</b>
Operations Section Chief	Fredman, Peter	Husky Energy Inc.	320-288-6161	
Deputy Operations Section Chief	Schade, Kollin	Husky Energy Inc.	317-292-6594	
Environmental Monitoring Group Supervisor	Beattie, Dave	Husky Energy Inc.	218-348-9051	
Waste Management Task Force Leader	Turner, Matt	Husky Energy Inc.	715-969-4873	
<b>Resources Required</b>				
<b>Area Of Operation</b>	<b>Resource Kind</b>	<b>Description</b>	<b>Quantity</b>	<b>Size</b>
Waste Management Task Force	Manpower: Responder	Manpower: Responder	2	
Waste Management Task Force	Manpower: Operator	Operator	1	
Waste Management Task Force	Front-end loader	Front-end loader	1	
<b>Assignments</b>				
<p>Contingent on Baker Risk clearance on a per site basis:</p> <p>Dispose of asphalt removed by the Asphalt Removal Task Force.</p> <p>Movement of disposal equipment should be directed by Asphalt Removal Task Force Leader</p> <p>All operations to follow the approved Asbestos and Waste Management Plans.</p>				
<b>Special Environmental Considerations</b>				
<p>Follow existing waste management plan and approved by applicable agencies. Actions shall be taken to minimize any release of hydrocarbons to the environment. Any hydrocarbon release shall be cleaned up immediately and disposed of properly. Notification of any hydrocarbon release shall be made to the GHD air monitoring group immediately for consideration in air monitoring.</p>				
<b>Special Site-Specific Safety Considerations</b>				
<p>If in Hot Zone, must follow Hot Zone Procedures. All other areas in the refinery require FR clothing, Hard Hat, Safety Glasses and safety boots. Refer to Permit writers for further guidance.</p> <p>A Safe Work Permit is required for all work. Safe Work Permits can be obtained in the ERT Building.</p> <p>Hazard assessment must be done to plan safe work.</p> <p>Be cognizant of the hazards of the products being handled.</p> <p>Use flashlights, vehicle lights and other lighting during nighttime activities. If warranted, request light plants and other larger lighting.</p> <p>Emergency Alarm system will signal need to evacuate from the site.</p> <p>For work in the hot zone or where damage has occurred to equipment, area must be assessed for asbestos and other hazardous materials by an Industrial Hygienist or Wisconsin Licensed Asbestos personnel prior to their work. Safe work permit request must include request for this determination. Any concerns found as part of this assessment must be addressed prior to any work being done.</p> <p>Be aware of the potential for severe weather. In the refinery, the Shift Foreman will make an announcement on the plant radio system if there are special precautions or if there is a need to take shelter.</p>				
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ICS 204 - Assignment List		Task Force: Waste Management Task Force	
Incident Name: 2018 Superior Refinery Fire		Period: Period 10 [05/19/2018 06:00 - 05/22/2018 06:00]	
Additional Information			
If impacted wildlife are observed. Do not approach or attempt to capture. Please contact Husky Hill Avenue guard shack at 715-398-8220 or 221			
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<b>ICS 204 - Assignment List</b>			Task Force: Security Task Force	
Incident Name: 2018 Superior Refinery Fire			Period: Period 10 [05/19/2018 06:00 - 05/22/2018 06:00]	
<b>Operations Personnel</b>				
<b>Position</b>	<b>Name</b>	<b>Affiliation</b>	<b>Contact Number(s)</b>	<b>Work Shift</b>
Operations Section Chief	Fredman, Peter	Husky Energy Inc.	320-288-6161	
Deputy Operations Section Chief	Schade, Kollin	Husky Energy Inc.	317-292-6594	
Security Task Force Leader	Brager, Lynn	Securitas	715-398-8220	
<b>Resources Required</b>				
<b>Area Of Operation</b>	<b>Resource Kind</b>	<b>Description</b>	<b>Quantity</b>	<b>Size</b>
Security Task Force	Manpower: Responder	Manpower: Responder	18	
Security Task Force	Vehicle	Security Vehicle	4	
<b>Assignments</b>				
<p>Securitas to maintain 24hr security checkpoints at command post and control sites. Roving security to patrol between sites and to additional locations as requested.</p> <p>Security to reference list of (Non-Husky) individuals approved for access.</p> <p>Maintain temporary road blocks as directed by SOFR.</p>				
<b>Communications</b>				
<b>Name / Function</b>		<b>Contact Details</b>		
ERT Channel		8		
Channel 1 Talk Around		11		
Primary		1		
Secondary		2		
Radio		3 to 7		
<b>Special Environmental Considerations</b>				
<p>Immediate notification of a breach in the security of the site should be reported through the ICS system to mitigate the potential for a release of hydrocarbon to the environment. Actions shall be taken to minimize any release of hydrocarbons to the environment. Any liquid hydrocarbon release shall be cleaned up immediately and disposed of properly. Notification of any venting/release of vapor/liquid hydrocarbon shall be made to the GHD air monitoring group immediately for consideration in air monitoring. Any liquid hydrocarbon release shall be cleaned up immediately.</p>				
<b>Special Site-Specific Safety Considerations</b>				
<p>Any work on roadways requires a high visibility vest.</p> <p>Be cognizant of vehicle traffic.</p> <p>Use flashlights, vehicle lights and other lighting during nighttime activities. If warranted, request light plants and other larger lighting.</p> <p>Park Vehicle for roadblocks so that your on not in oncoming traffics lane. If someone is not paying attention, they could potentially not notice the roadblock. Keep truck flashing lights on if manning roadblocks.</p> <p>Be aware of the potential for severe weather. In the refinery, the Shift Foreman will make an announcement on the plant radio system if there are special precautions or if there is a need to take shelter.</p>				
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ICS 204 - Assignment List		Task Force: Security Task Force	
Incident Name: 2018 Superior Refinery Fire		Period: Period 10 [05/19/2018 06:00 - 05/22/2018 06:00]	
Additional Information			
If impacted wildlife are observed. Do not approach or attempt to capture. Please contact Husky Hill Avenue guard shack at 715-398-8220 or 221			
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<b>ICS 204 - Assignment List</b>			Task Force: Decon Task Force	
Incident Name: 2018 Superior Refinery Fire			Period: Period 10 [05/19/2018 06:00 - 05/22/2018 06:00]	
<b>Operations Personnel</b>				
<b>Position</b>	<b>Name</b>	<b>Affiliation</b>	<b>Contact Number(s)</b>	<b>Work Shift</b>
Operations Section Chief	Fredman, Peter	Husky Energy Inc.	320-288-6161	
Deputy Operations Section Chief	Schade, Kollin	Husky Energy Inc.	317-292-6594	
Decon Task Force Leader	Raiha, John	Husky Energy Inc.	218-390-4078	
<b>Resources Required</b>				
<b>Area Of Operation</b>	<b>Resource Kind</b>	<b>Description</b>	<b>Quantity</b>	<b>Size</b>
Decon Task Force	Manpower: Responder	Manpower: Responder	4	
Decon Task Force	Miscellaneous	Decon Station	3	
<b>Assignments</b>				
<p>Conduct personnel decon for those exiting the hot zone per standard procedure outlined in Refinery ERP.</p> <p>Decon stations are at;</p> <ul style="list-style-type: none"> <li>- #1 Cooling tower</li> <li>- West of flare</li> <li>- ALKY (Specifically for work inside ALKY unit, decontamination for ALKY chemical gear)</li> </ul> <p>Asbestos decontamination facilities will be provided by the Asbestos Task Force</p>				
<b>Communications</b>				
<b>Name / Function</b>		<b>Contact Details</b>		
ERT Channel		8		
Channel 1 Talk Around		11		
Primary		1		
Secondary		2		
Radio		3 to 7		
<b>Special Environmental Considerations</b>				
<p>Actions shall be taken to minimize any release of hydrocarbons to the environment. Any liquid hydrocarbon release shall be cleaned up immediately and disposed of properly.</p> <p>Notification of any venting/release of vapor/liquid hydrocarbon shall be made to the GHD air monitoring group immediately for consideration in air monitoring. Any liquid hydrocarbon release shall be cleaned up immediately.</p>				
<b>Special Site-Specific Safety Considerations</b>				
<p>Decon personnel must wear chemical gear over FR coveralls.</p> <p>Use flashlights, vehicle lights and other lighting during nighttime activities. If warranted, request light plants and other larger lighting.</p> <p>Four station boot Decon:</p> <ol style="list-style-type: none"> <li>1. Simple Green and/or Orange Peel used to decon at Wash Station #1</li> <li>2. Water rinse at station #2</li> <li>3. Water rinse at station #3</li> <li>4. Clean water tub at station #4</li> </ol> <p>Be aware of the potential for severe weather. In the refinery, the Shift Foreman will make an announcement on the plant radio system if there are special precautions or if there is a need to take shelter.</p>				
<b>Additional Information</b>				
If impacted wildlife are observed. Do not approach or attempt to capture. Please contact Husky Hill Avenue guard shack at 715-398-8220 or 221				
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<b>ICS 204 - Assignment List</b>			Other: Investigation Task Force	
Incident Name: 2018 Superior Refinery Fire			Period: Period 10 [05/19/2018 06:00 - 05/22/2018 06:00]	
<b>Operations Personnel</b>				
<b>Position</b>	<b>Name</b>	<b>Affiliation</b>	<b>Contact Number(s)</b>	<b>Work Shift</b>
Operations Section Chief	Fredman, Peter	Husky Energy Inc.	320-288-6161	
Deputy Operations Section Chief	Schade, Kollin	Husky Energy Inc.	317-292-6594	
Investigation Task Force	Shtand, Wally	Husky Energy Inc.	403 512-1437	
<b>Resources Required</b>				
<b>Area Of Operation</b>	<b>Resource Kind</b>	<b>Description</b>	<b>Quantity</b>	<b>Size</b>
Investigation Task Force	Manpower: Responder	Manpower: Responder	18	
<b>Assignments</b>				
<p>Continue the DCS data replication.</p> <p>Continue to support evidence collection as prioritized by operations.</p> <p>Baker Risk working on clearing asphalt removal on affected areas.</p> <p>Develop plan for walk down.</p> <p>Secure evidence storage:</p> <ul style="list-style-type: none"> <li>- Confirm Location</li> <li>- Validate installation option</li> <li>- Choose installion vendor</li> </ul>				
<b>Special Site-Specific Safety Considerations</b>				
<p>If in Hot Zone, must follow Hot Zone Procedures. All other areas in the refinery require FR clothing, Hard Hat, Safety Glasses and safety boots. Refer to Permit writers for further guidance.</p> <p>A Safe Work Permit is required for all work. Safe Work Permits can be obtained in the ERT Building.</p> <p>Hazard assessment must be done to plan safe work.</p> <p>Be cognizant of the hazards of the product in reactor as well as nitrogen, fire and similar hazards.</p> <p>Use flashlights, vehicle lights and other lighting during nighttime activities. If warranted, request light plants and other larger lighting.</p> <p>Emergency Alarm system will signal need to evacuate from the site. Secondary alarm is via the Channel 1 on plant radio.</p> <p>For work in the hot zone or where damage has occurred to equipment, area must be assessed for asbestos and other hazardous materials by an Industrial Hygienist or Wisconsin Licensed Asbestos personnel prior to their work. Safe work permit request must include request for this determination. Any concerns found as part of this assessment must be addressed prior to any work being done.</p> <p>Be aware of the potential for severe weather. The Shift Foreman will make an announcement if there are special precautions or if there is a need to take shelter.</p>				
<b>Additional Information</b>				
If impacted wildlife are observed. Do not approach or attempt to capture. Please contact Husky Hill Avenue guard shack at 715-398-8220 or 221				
<b>ICS 204 - Assignment List</b>			Updated 05/10/2018 14:17 UTC -6:00	
<b>INCIDENT ACTION PLAN SOFTWARE™</b>	Printed 05/18/2018 15:34 UTC -6:00	Page 50 of 81	© TRG	

<b>ICS 205 - Radio Communications</b>					Version Name: Overall				
Incident Name: 2018 Superior Refinery Fire					Period: Period 10 [05/19/2018 06:00 - 05/22/2018 06:00]				
<b>Radio Channel Information</b>									
Ch #	Function	Channel Name/ Trunked Radio System Talkgroup	Assignment	Rx Freq N or W	Rx Tone/NAC	Tx Freq N or W	Tx Tone/NAC	Mode (A, D, or M)	Remarks
1	Primary	Primary Radio Channel - Repeated							
2	Secondary	Secondary Radio Channel - Repeated							Secondary Repeated Channel Unit and Uses
3 to 7	Radio	Radio to Radio Channels							Working Channel
8	ERT Channel	Emergency Response Channel							Emergency Response Team Channel
11	Channel 1 Talk Around	Channel 1 Talk Around							Use this channel in case of failure of repeated Channel 1
12	Channel 2 Talk Around	Channel 2 Talk Around							Use this channel in case of failure of repeated Channel 2
<b>Special Radio Instructions</b>									
<b>ICS 205 - Radio Communications</b>					Prepared By Logistics, Updated 05/10/2018 13:14 UTC -6:00 PP				
INCIDENT ACTION PLAN SOFTWARE™			Printed 05/18/2018 15:34 UTC -6:00		Page 51 of 81			© TRG	

ICS 205a - Communications List			Version Name: Overall			
Incident Name: 2018 Superior Refinery Fire			Period: Period 10 [05/19/2018 06:00 - 05/22/2018 06:00]			
Local Communications Information						
Name	Incident Assigned Position	Mobile Phone	Work Phone	Email	Notes	
Goedde, Ed	Incident Commander	Non-Responsive				
Williams, Blake	Deputy Incident Commander		403 298-7443	blake.williams@huskyenergy.com		
Morrison, Dave	Agency Representative			morrison.david@epa.gov		
Obery, John	Legal Officer			john.obery@huskyenergy.com		
Syphard, Dan	Legal Officer (5/16)					
Lott, Sean	Liaison Officer			Sean.Lott@huskyenergy.com		
O'Brien, John	Safety Officer			john.obrien@huskyenergy.com		
Bachhuber, Julie	HR Officer			julie.bachhuber@huskyenergy.com		
Westersund, Elizabeth	Public Information Officer			elizabeth.westersund@huskyenergy.com		
Fredman, Peter	Operations Section Chief			peter.fredman@huskyenergy.com		
Schade, Kollin	Deputy Operations Section Chief			kollin.schade@huskyenergy.com		
Miciak, Kevin	Planning Section Chief			306 820-4309	Kevin.Miciak@huskyenergy.com	
Choate, Jerry	Logistics Section Chief				jerry.choate@huskyenergy.com	
Shaah, Dax	Deputy Logistics Section Chief (May 8th)					
Bruckelmyer, Jason	Support Branch Director				jason.bruckelmyer@huskyenergy.com	
Black, Jason	Supply Unit Leader				jason.black@huskyenergy.com	
Verrill, John	Finance Section Chief					
Miciak, Kevin	Situation Unit Leader			306 820-4309	Kevin.Miciak@huskyenergy.com	
Buckley, Joe	Resource Unit Leader				jbuckley@responsegroupinc.com	
Broadbent, Evan	Resource Unit Leader (5/16)			281-880-5000	ebroadbent@responsegroupinc.com	
Takahashi, Yoshimi	Documentation Unit Leader			Yoshimi.takahashi@huskyenergy.com		
Beattie, Dave	Environmental Unit Leader			dave.beattie@huskyenergy.com		
Hill, Travis	GIS Specialist		281-880-5000	thill@responsegroupinc.com		
Lozada, Rene	IAP Support Specialist - PLN			rlozada@responsegroupinc.com		
ICS 205a - Communications List			Prepared By Logistics, Updated 05/16/2018 15:26 UTC -6:00 PP			
INCIDENT ACTION PLAN SOFTWARE™		Printed 05/18/2018 15:34 UTC -6:00		Page 52 of 81		
				© TRG		

<b>ICS 206 - Medical Plan</b>				Version Name: Overall				
Incident Name: 2018 Superior Refinery Fire				Period: Period 10 [05/19/2018 06:00 - 05/22/2018 06:00]				
<b>Medical Aid Stations</b>								
<i>Name</i>	<i>Location</i>	<i>Paramedic On Site</i>	<i>Phone</i>	<i>Radio</i>				
Superior Refinery Medical Aid Station	-92.07578 46.68889	<input checked="" type="checkbox"/>						
<b>Transportation (Ground and/or Air Ambulance Services)</b>								
<i>Ambulance Service</i>	<i>Location</i>	<i>Phone</i>	<i>Radio</i>	<i>Air</i>	<i>ALS</i>			
Global Air Ambulance	3500 Tower Ave. Superior, WI 54888 -92.07202 46.68952	Ph1: (305) 514-0942		<input checked="" type="checkbox"/>	<input type="checkbox"/>			
Gold Cross Ambulance Service	4505 W. Michigan St. Duluth, MN -92.15475 46.74444	Ph1: (218) 628-9323		<input type="checkbox"/>	<input type="checkbox"/>			
<b>Hospitals</b>								
<i>Hospital</i>	<i>Location</i>	<i>Phone</i>	<i>Radio</i>	<i>Air Travel Time</i>	<i>Ground Travel Time</i>	<i>Trauma Center</i>	<i>Helipad</i>	<i>Burn Center</i>
Essentia Health St. Mary's Hospital	3500 Tower Ave Superior, MN -92.10236 46.69748	Ph1: (715) 817-7000		min	15 min	II	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Essentia Health Duluth (Miller Dwan) Thermal or Chemical Burns	502 E 2nd St Duluth, MN -92.09367 46.79244	Ph1: (218) 727-8762		min	30 min	II	<input type="checkbox"/>	<input checked="" type="checkbox"/>
St Luke's Duluth	915 East First Street Duluth, MN -92.08762 46.79718	Ph1: (218) 249-5555		min	30 min	II	<input checked="" type="checkbox"/>	<input type="checkbox"/>
				min	min		<input type="checkbox"/>	<input type="checkbox"/>
<b>ICS 206 - Medical Plan</b>				Prepared By Medical, Updated 05/01/2018 13:08 UTC -6:00 PP				
<b>INCIDENT ACTION PLAN SOFTWARE™</b>		Printed 05/18/2018 15:34 UTC -6:00		Page 53 of 81			© TRG	

ICS 206 - Medical Plan		Version Name: Overall	
Incident Name: 2018 Superior Refinery Fire		Period: Period 10 [05/19/2018 06:00 - 05/22/2018 06:00]	
<p align="center"><b>Special Medical Emergency Procedures</b></p>			
<p><b>All injured employees who require more than in-house first aid, (i.e. lacerations requiring stitches, severe eye problems, severe strains/sprains or fractures) will be sent to the following medical facility:</b></p> <p>Essentia St. Mary's Occupational Medicine Clinic  3500 Tower Ave  Superior, WI  (715) 817-7100</p>			
<p><b>INJURIES INVOLVING EXPOSURE TO HYDROFLUORIC ACID</b></p> <p>For minor exposures, the employee may be transported to Essentia St. Mary's Emergency Room in Superior, the Essentia Duluth Clinic Occupational Medicine Clinic or the Essentia St. Mary's Hospital Emergency Room in Duluth.</p> <p>For all but minor exposures, the employee should be transported by ambulance to:  St. Mary's Hospital Emergency Room in Duluth:  407 East 3rd Street  Duluth, MN  218-786-4000</p>			
<p><b>INJURIES INVOLVING THERMAL OR CHEMICAL BURNS</b></p> <p>For injuries involving all but minor thermal or chemical burns, employees should be transported by ambulance to:  Essentia Miller-Dwan Burn Center 502 E. Second St., First Floor  Duluth, MN  (218) 786-2815</p>			
<div></div>			
ICS 206 - Medical Plan		Prepared By Medical, Updated 05/01/2018 13:08 UTC -6:00 PP	
INCIDENT ACTION PLAN SOFTWARE™	Printed 05/18/2018 15:34 UTC -6:00	Page 54 of 81	© TRG

## MEDICAL SERVICES/EMPLOYEE MEDICAL RECORDS/ WORKER'S COMPENSATION

### SCOPE

This Standard Practice Instructions is to be considered Husky Superior company policy and minimum acceptable standards under normal conditions. Stricter requirements may apply under certain situations. If a problem is encountered, consultation with a safety professional should be considered before proceeding. Keep in mind that any alternative procedure must be at least as effective as these instructions in providing a safe workplace.

### RATIONALE

This procedure was developed to inform all supervisors of the steps which need to be taken to insure that all injured employees are properly cared for, to explain access to employee medical records, and to explain the worker's compensation procedure.

### APPLICATION

This policy describes the procedure that needs to be followed by all Husky Superior employees when it is necessary to obtain medical services, access medical records, or receive worker's compensation.

### DEFINITIONS

**Minor injury** – Any injury that can be properly attended with in-house first aid. This type of injury might include strains/sprains, lacerations not requiring stitches, irrigating eyes or minor burns (either chemical or thermal).

**Medical First-Aid Injuries** – Any injury that can be properly attended by a physician with first-aid treatment.

**Serious Injury** – An injury that resulted in an OSHA recordable injury, lost-time injury (either lost workdays or restricted workdays) or fatality.

**PROCEDURE FOR OBTAINING MEDICAL SERVICES**

**Note: On-Shift Emergency Response Team (ERT) Members should be called to assist on all, but very minor, medical incidents.**

**DAYTIME HOURS, MONDAY THROUGH FRIDAY**

All injured employees who require more than in-house first aid, (i.e. lacerations requiring stitches, severe eye problems, severe strains/sprains or fractures) will be sent to the following medical facility:

Essentia SMDC Occupational Medicine Clinic  
Duluth Clinic 3rd Street Building  
400 E. Third St.  
Duluth, MN  
(218) 786-3392

-or-

Essentia St. Mary's Occupational Medicine Clinic  
3500 Tower Ave  
Superior, WI  
(715) 817-7100

- A. The immediate supervisor shall contact the Safety Department and advise of the injured employee.
- B. The Safety Manager or other member of the Safety Department will notify Essentia that an employee of Husky Superior is in route and give them a brief description of the employee's condition.
  - a. If requested by the Employee's Supervisor, the medical facility will also be advised that a drug screen and breath alcohol test according to the Husky Superior Drug and Alcohol Program will be needed.
- C. The Safety Manager, other member of the Safety Department or the Shift Foreman/Employee's Supervisor should accompany the injured employee to the medical facility to assure prompt and immediate medical attention is obtained. The medical facility will direct proper medical attention/treatment.

**EVENINGS, WEEKENDS, HOLIDAYS**

If an employee is injured Monday through Friday, after 5:00 PM, on a Saturday, Sunday, or holiday, the shift supervisor will follow these guidelines.

**Minor Injuries**

All injured employees who require more than in-house first aid, (i.e. lacerations requiring stitches, severe eye problems, severe strains/sprains or fractures) will be sent to the following medical facility:

Essentia St. Mary's Emergency Room  
3500 Tower Ave  
Superior, WI 54880  
Phone: (715) 817-7100

**Serious Injury**

Some injuries may be such that immediate outside medical attention is required. If it has been determined that the injury is not life threatening but will require outside medical attention, the injured employee should be transported either by company vehicle or by ambulance. Unless directed by ambulance or other emergency responders, the employee should be transported to the Emergency Room at Essentia St. Mary's Superior or Duluth.

- A. The immediate supervisor shall contact the Safety Department and advise of the injured employee.
- B. The Supervisor or the Safety Manager will notify Essentia that an employee of Husky Superior is in route and give them a brief description of the employee's condition.
  - a. If requested by the Employee's Supervisor, the medical facility will also be advised that a drug screen and breath alcohol test according to the Husky Superior Drug and Alcohol Program will be needed.
- C. The Shift Foreman/Employee's Supervisor, Safety Manager/Safety Department Member or other Husky Superior Employee should accompany the injured employee to the medical facility to assure prompt and immediate medical attention is obtained. The medical facility will direct proper medical attention/treatment.

**LIFE THREATENING EMERGENCIES**

If the injury is life threatening, the injured employee will be transported to the hospital by ambulance. An injured employee under these conditions will not be transported by a Husky Superior or contractor employee. The supervisor in charge shall call or designate someone to call 911.

**Examples of Life Threatening Situations**

- a. Employee is unconscious
- b. Severe bleeding
- c. Cyanosis (blue lips, fingernails)
- d. Severe head injury
- e. Severe chest pain, pain radiating down arms
- f. Compound fractures (bones exposed)
- g. Immediate excessive swelling
- h. Hypothermia
- i. Heatstroke
- j. Stroke

**Information for Operator at 911**

- a. Give a brief description of the problem. This will enable EMT's to prepare the equipment necessary for the immediate care of the injured employee.
- b. Give direction to the appropriate gate nearest the accident; advise that there will be someone at the gate to escort the emergency vehicle to the site of the accident.

**After the 911 call, contact the following:**

- a. Call security and advise them of the pending arrival of the emergency vehicle.
- b. Call the Essentia Medical facility that the employee was transported too and advise them that an employee of Husky Superior is in route and give them a brief description of the employee's condition and require a post accident drug/alcohol screen.
- c. Notify either the Safety Manager, on-call personnel (weekends/holidays), or any available member of management.

**INJURIES INVOLVING EXPOSURE TO HYDROFLUORIC ACID**

For minor exposures, the employee may be transported to Essentia St. Mary's Emergency Room in Superior, the Essentia Duluth Clinic Occupational Medicine Clinic or the Essentia St. Mary's Hospital Emergency Room in Duluth.

For all but minor exposures, the employee should be transported by ambulance to:

St. Mary's Hospital Emergency Room in Duluth:  
407 East 3<sup>rd</sup> Street  
Duluth, MN  
218-786-4000

Follow notification and other procedures as outlined above depending on the time of day that the exposure occurs.

**INJURIES INVOLVING THERMAL OR CHEMICAL BURNS**

For injuries involving all but minor thermal or chemical burns, employees should be transported by ambulance to:

Essentia Miller-Dwan Burn Center  
502 E. Second St., First Floor  
Duluth, MN  
(218) 786-2815

Follow notification and other procedures as outlined above depending on the time of day that the exposure occurs.

**SUPERVISOR'S INCIDENT/INJURY REPORT**

The immediate supervisor shall complete the Supervisor's Incident/Injury Report form as soon as possible after the occurrence, but no later than the end of the shift on which it occurred.

**NOTE:** Husky Superior is required to notify OSHA within 8-hours of any incident that results in a fatality or the hospitalization of three or more employees. This notification will result in an OSHA investigation of the incident.

## ACCESS TO RECORDS

The following records shall be made available, upon request, to any employee and to their representatives for examination and copying at a reasonable time and manner:

- a. OSHA 300 log;
- b. Work Comp First Report of Injury;
- c. OSHA 300A Annual Summary of occupational injuries and illnesses;
- d. Pulmonary function and audiometric testing.
- e. Industrial hygiene sampling records.

Medical records are kept in a confidential file, separate from the personnel file in the general administrative office. These files include the pre-placement physical record and worker's compensation information. Audio and pulmonary medical records are maintained in a separate file in the Safety Department. Employees may inspect their medical records by contacting the Supervisor of Administrative Services.

## WORKER'S COMPENSATION

An employee involved in a personal injury has the responsibility to perform the following steps:

1. Receive medical attention if needed.
2. Report injury to supervision immediately!
3. Complete all appropriate forms with supervision.

**NOTE:** These forms must be completed as soon as possible after the occurrence, but no later than at the end of the shift on which it occurred.

4. Participate in all investigations as necessary.

If an employee has an injury or illness that has not been reported as an accident but the employee believes it is work related, the employee must inform the company of the circumstance of the injury or illness and how it relates to the work place.

When the employee gives notice of an injury, the employee may see a physician of his/her choice. However, Husky Superior reserves the right to send the employee to another doctor for a second opinion at its discretion. In emergencies, Husky Superior may choose the practitioner without offering a choice, but after the emergency, the employee still has the option of seeing his/her own physician. The employee also may change practitioners once, with notice to Husky Superior.

The employee must provide Husky Superior with a doctor's report that provides evidence that the illness/injury is related to the employee workplace.

## **Clinic/Hospital Information**

### **Minor Injuries - Daytime Hours, Monday through Friday (either):**

Essentia SMDC Occupational Medicine Clinic  
Duluth Clinic 3rd Street Building  
400 E. Third St.  
Duluth, MN  
(218) 786-3392

Essentia St. Mary's Occupational Medicine Clinic  
3500 Tower Ave  
Superior, WI  
(715) 817-7100

### **Minor Injuries - Evenings, Weekends or Holidays:**

Essentia St. Mary's ER - Superior  
3500 Tower Ave  
Superior, WI 54880  
(715) 817-7100

### **Serious Injuries**

**Unless directed by ambulance or other emergency responders, the employee should be transported to either:**

Essentia St. Mary's ER - Superior  
3500 Tower Ave  
Superior, WI 54880  
(715) 817-7100

Essential St. Mary's Hospital ER - Duluth:  
407 East 3<sup>rd</sup> Street  
Duluth, MN  
218-786-4000

### **HF Minor Exposures (any of the following):**

Essentia St. Mary's ER - Superior  
3500 Tower Ave  
Superior, WI 54880  
(715) 817-7100

Essentia Occup. Medicine Clinic  
Duluth Clinic - 3rd Street Building  
400 E. Third St.  
Duluth, MN  
(218) 786-3392

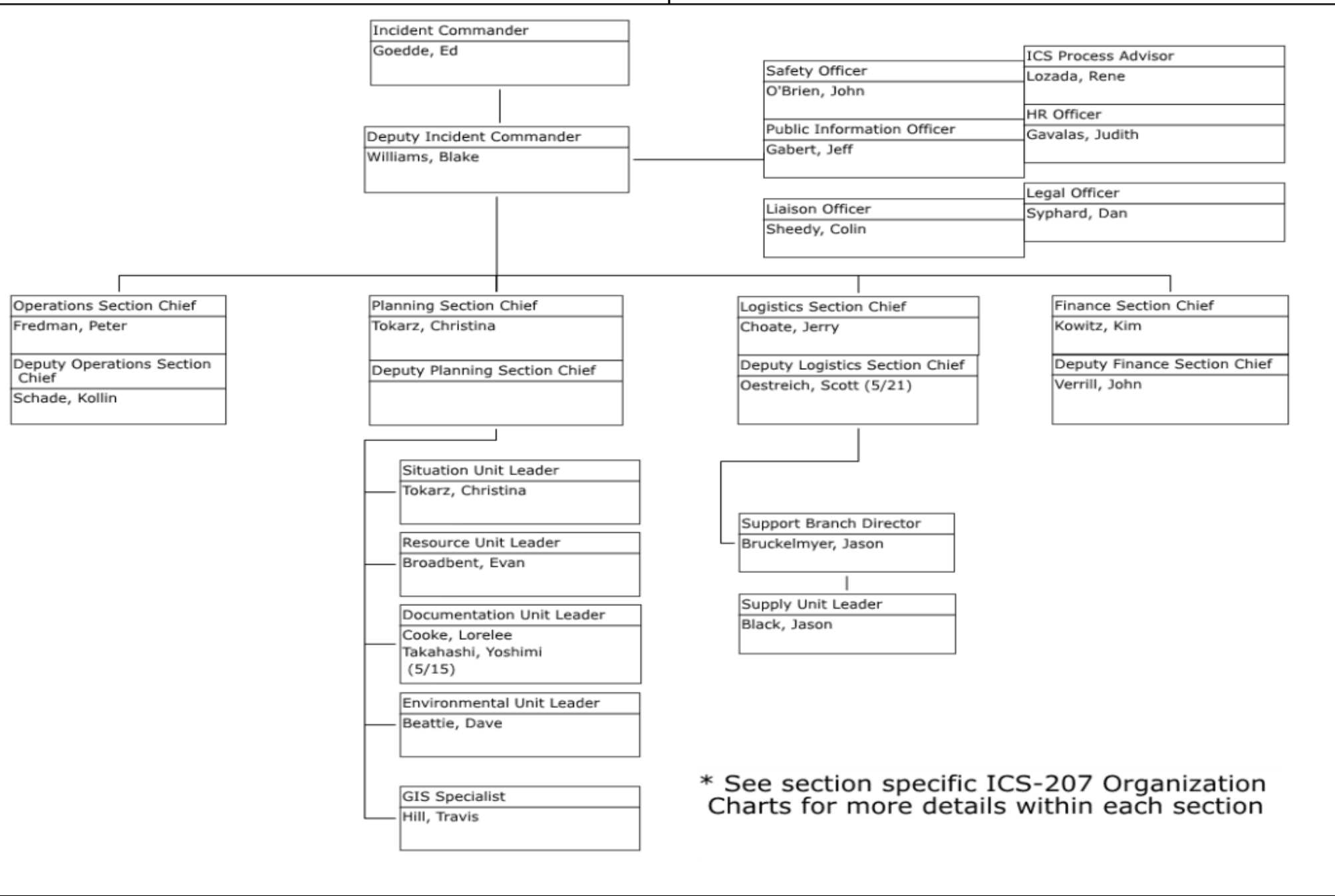
Essential St. Mary's ER - Duluth:  
407 East 3<sup>rd</sup> Street  
Duluth, MN  
218-786-4000

### **HF Serious Exposures:**

Essential St. Mary's Hospital ER - Duluth:  
407 East 3<sup>rd</sup> Street  
Duluth, MN  
218-786-4000

### **Serious Thermal or Chemical Burns**

Essentia Miller-Dwan Burn Center  
502 E. Second Street, First Floor  
Duluth, MN  
(218) 786-2815



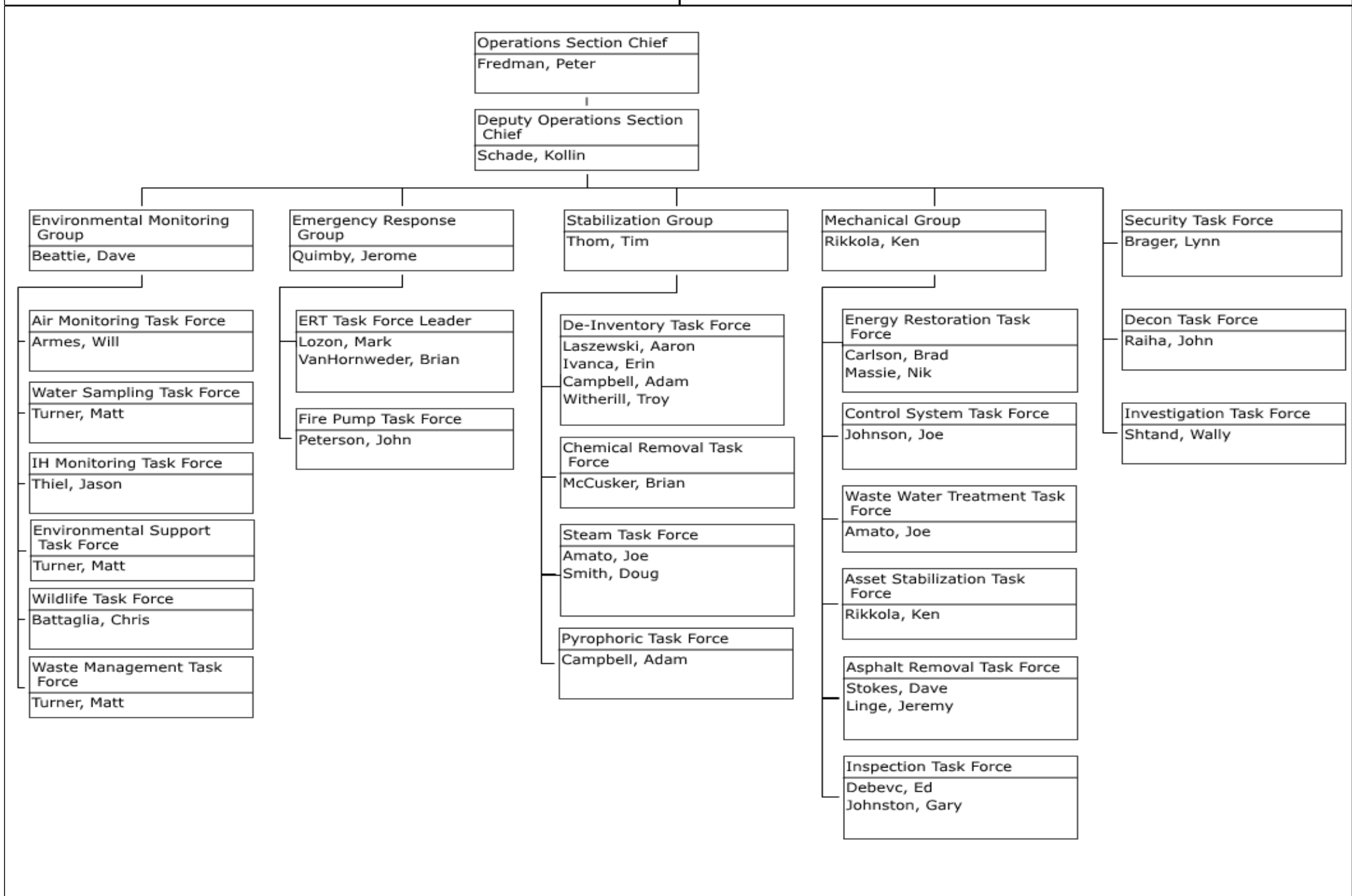
\* See section specific ICS-207 Organization Charts for more details within each section

## ICS 207 - Organization Chart

Version Name: Period 10 - Operations

Incident Name: 2018 Superior Refinery Fire

Period: Period 10 [05/19/2018 06:00 - 05/22/2018 06:00]



<b>ICS 208 - Site Safety Plan</b>					Version Name: Refinery Site				
Incident Name: 2018 Superior Refinery Fire					Period: Period 10 [05/19/2018 06:00 - 05/22/2018 06:00]				
Applies to Site: Superior Refinery									
<b>Site Characterization</b>									
<b>Water</b>		<b>Land</b>		<b>Weather</b>		Sunny			
<b>Wave Height</b>		<b>Land Use</b>		<b>Air Temp</b>		44 Fahrenheit			
<b>Speed</b>				<b>Wind Speed</b>		13 mph			
<b>Direction</b>				<b>Direction</b>		NE			
<b>Site Hazards</b>									
<b>Yes</b>	<b>No</b>	<b>Hazards</b>	<b>Yes</b>	<b>No</b>	<b>Hazards</b>	<b>Yes</b>	<b>No</b>	<b>Hazards</b>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Boat Safety	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Fire, Explosion, In-situ Burning	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Pump Hose	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Chemical Hazards	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Heat Stress	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Slips, Trips, and Falls	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Cold Stress	<input type="checkbox"/>	<input type="checkbox"/>	Helicopter Operations	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Steam and Hot Water	
<input type="checkbox"/>	<input type="checkbox"/>	Confined Spaces	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Lifting	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Trenching/Excavation	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Drum Handling	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Motor Vehicles	<input type="checkbox"/>	<input checked="" type="checkbox"/>	UV Radiation	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Equipment Operations	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Noise	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Visibility	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Electrical Operations	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Overhead/Buried Utilities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Weather	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Fatigue	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Plants/Wildlife	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Work Near Water	
<b>Air Monitoring Limits</b>									
Oxygen Level		19.5 to 22.5%	Benzene		1 PPM	Carbon Moxide		35 PPM	
LEL		5%	Total Hydrocarbons		500 PPM	Hydroflouric Acid		3 PPM	
Hydrogen Sulfide		10 PPM	Asbestos		0.1 Fiber per cc	Sulfur Dioxide		2 PPM	
<b>Engineering Controls</b>									
<input type="checkbox"/>	Source of release secured		<input type="checkbox"/>	Valve(s) closed		<input type="checkbox"/>	Energy sources locked/tagged out		
<input type="checkbox"/>	Site secured		<input checked="" type="checkbox"/>	Facility shut down					
<b>Personal Protective Equipment Required</b>									
<input type="checkbox"/>	Impervious suit		<input checked="" type="checkbox"/>	Hard hats		<input checked="" type="checkbox"/>	Boots		
<input type="checkbox"/>	Inner gloves		<input checked="" type="checkbox"/>	Respirators		<input checked="" type="checkbox"/>	Bunker Gear		
<input checked="" type="checkbox"/>	Outer gloves		<input checked="" type="checkbox"/>	Eye protection		<input checked="" type="checkbox"/>	ERT SCBA		
<input checked="" type="checkbox"/>	Flame resistant clothing		<input checked="" type="checkbox"/>	Personal flotation					
<b>Additional Control Measures Established</b>									
<input checked="" type="checkbox"/>	Decontamination		<input checked="" type="checkbox"/>	Illumination		<input type="checkbox"/>	Additional stations established		
<input type="checkbox"/>	Sanitation		<input type="checkbox"/>	Medical surveillance		<input type="checkbox"/>	Facilities provided		
<b>Work Plan</b>									
<input checked="" type="checkbox"/>	Booming		<input type="checkbox"/>	Excavation		<input type="checkbox"/>	Hot work		
<input type="checkbox"/>	Skimming		<input checked="" type="checkbox"/>	Heavy equipment		<input checked="" type="checkbox"/>	Appropriate permits used		
<input checked="" type="checkbox"/>	Vac trucks		<input checked="" type="checkbox"/>	Sorbent pads					
<input checked="" type="checkbox"/>	Pumping		<input checked="" type="checkbox"/>	Patching					
<b>Training</b>									
<input checked="" type="checkbox"/>	Verified site workers trained per local/federal regulatory requirements			<b>Training Requirements</b>					
<b>ICS 208 - Site Safety Plan</b>					Prepared By O'Brien, John, Updated 05/15/2018 07:24 UTC -6:00 PP				
<b>INCIDENT ACTION PLAN SOFTWARE™</b>		Printed 05/18/2018 15:34 UTC -6:00			Page 63 of 81			© TRG	

ICS 208 - Site Safety Plan				Version Name: Refinery Site			
Incident Name: 2018 Superior Refinery Fire				Period: Period 10 [05/19/2018 06:00 - 05/22/2018 06:00]			
Organization							
Position	Name	Telephone/Radio	Position	Name	Telephone/Radio		
Incident Commander	Long, David	403-542-1338	Safety Officer	O'Brien, John	218-390-4367		
Deputy Incident Commander	Harris, Paul	780 522-5060	Operations Section Chief	Fredman, Peter	320-288-6161		
Emergency Plan							
<input checked="" type="checkbox"/>	Fire Prevention Plan	<input checked="" type="checkbox"/>	Evacuation Plan				
<input checked="" type="checkbox"/>	Alarm System	<input checked="" type="checkbox"/>	First Aid Location				
Notifications							
Facility		Phone	Facility		Phone		
<input checked="" type="checkbox"/>	Hospital	Essential St. Mary's Hospital	218-786-4000	<input checked="" type="checkbox"/>	Fire	Superior Fire Department	911
<input checked="" type="checkbox"/>	Ambulance	Gold Cross	911	<input checked="" type="checkbox"/>	Law Enforcement	Superior Police Department	911
<input type="checkbox"/>	Air Ambulance			<input checked="" type="checkbox"/>	Emergency Response/Rescue	ERT	Radio
Initial Briefing							
<input checked="" type="checkbox"/>	Initial safety briefing prepared for each site						
Attachments/Appendices							
Attachment			Filename				
SDSs are available on the Refinery Intranet..rtf			SDSs are available on the Refinery Intranet..rtf				
<div>ICS 208 - Site Safety Plan</div> <div> <div>INCIDENT ACTION PLAN SOFTWARE™</div> <div>Printed 05/18/2018 15:34 UTC -6:00</div> </div> <div> <div>Prepared By O'Brien, John, Updated 05/15/2018 07:24 UTC -6:00 PP</div> <div>Page 64 of 81</div> <div>© TRG</div> </div>							

# Superior Refinery Fire

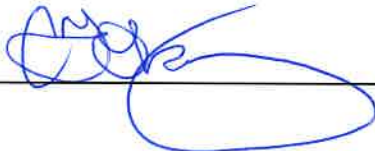
## Asset Assessment Plan – Crude Unit

Authored by: Gary Johnston / SO DEBEVC

Date: 16 MAY 18

Approved by:

Operations Section Chief: 

Planning Section Chief: 

Safety Officer:  (Per 2045 + Absence Plan)

Investigation Lead: Wally Shtand 

Incident Commander: 

Prepared by Operations Section



## MEMORANDUM

**DATE:** May 8, 2013  
**TO:** To whom it may concern  
**FROM:** Arun Sreeranganathan, Ph.D., P.E.  
**RE:** SES Field Hardness Measurement Protocol for TeleBrineller, Rev 1

This memo documents the field hardness measurement protocol established by Stress Engineering Services, Inc. (SES) when using TeleBrineller portable hardness tester.

1.0 Surface Preparation - The area of measurement shall be cleaned of oxide, oil, dirt, or other contamination. The aim is to smoothen the area to such an extent that the indentation is large compared to the surface roughness. This may require successive grinding with progressively finer grit size flapper wheels up to 240-grit. In some cases, initial grinding with a stone disk may be necessary to remove the oxide layer, or even to remove pits and scratches.

### 2.0 Hardness Measurement

2.1 *Reference Bars* – Appropriate reference bars that are properly calibrated shall be used at each location. An accuracy of  $\pm 5\%$  is consistently attainable, provided that the Brinell hardness number (BHN) of the test bar does not differ from the BHN of the test piece by more than 15%. Note that one or more ‘trial’ measurements might be required to determine the appropriate reference bar to be used at any given location.

2.2 *Indentation Measurement* – Measure the diameter of each indentation at two locations ( $d_1$  &  $d_2$ ) right angles to each other. The mean of the two measurements shall be used for the calculation of the hardness number. When indentations are made on a curved surface, the minimum radius of curvature of the surface shall be two and a half times the diameter of the ball. Indentations made on curved surfaces may be slightly elliptical rather than circular in shape. In such cases, the measurements of the indentation shall be taken as the mean of the major and minor axes.

2.3 *Indentation Spacing* – The distance between the centers of two adjacent indentations shall be at least three times the diameter of the mean indentation.

2.4 *Number of Measurements* – A minimum of three measurements (five measurements are preferred) shall be performed at each area of measurement (making sure that the spacing guidelines given in Section 2.3 are followed).

2.5 *Location Identifier* – The location of the measurement shall be noted on a drawing or sketch of the equipment, with an identifying letter or number code, sufficient to allow follow up investigation at the same point.

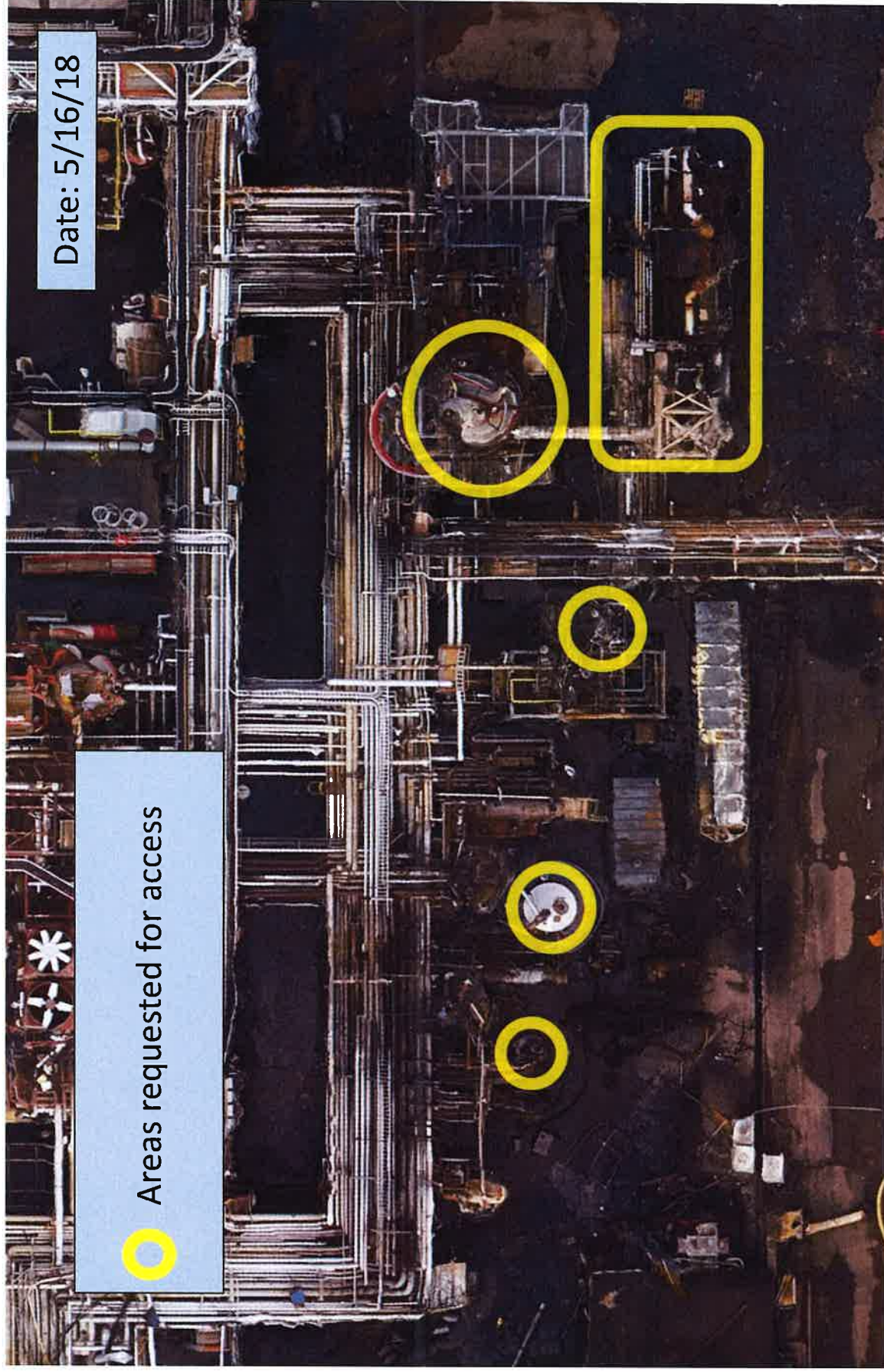
2.6 *Fire Assessment* – If the aim of the hardness measurements is to assess fire damage, the measurements shall be performed in the base metal, away from the weld joints. No measurements shall be made within two inches of a weld joint.

### 3.0 Reporting

The report sheet shall contain the following information:

- 3.1 Date
- 3.2 Examiner's name
- 3.3 Component (vessel, piping identifier)
- 3.4 Description of measurement locations (location identifiers per Section 2.5, any anomalies observed, etc.)
- 3.5 Diameter measurements  $d_1$  &  $d_2$  per Section 2.2
- 3.6 Hardness of the reference bar used
- 3.7 Hardness measurements

# Visual Inspection/NDE Access Request - Stress Engineering Services





## MEMORANDUM

**DATE:** 5-16-18

**TO:** Gary Johnston

**FROM:** Franklin Perry

**RE:** 04C-V06, Naptha Splitter, Inspection Request (Rev. 0)

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### 04C-V06 Naptha Splitter

The following inspection items are required at all locations specified on the attached drawing. This is a preliminary inspection due to limited access. Further inspection will be necessary to deem the vessel fit for service.

1. The deformed lower platform is blocking part of the exposed shell. Assess if safe access to the exposed shell is possible to each side of the platform.
2. Perform Brinell hardness testing at accessible locations marked on the attached drawing, with surfaces prepared by hand file. Refer to Stress Engineering Field Hardness Measurement Protocol for Telebrineller, Rev. 1 for hardness testing requirements.
3. Perform UT thickness measurement at all hardness measurement locations except on flanges.
4. Visually inspect all nozzle faces for signs of distortion.

## 04C-V06

Stress Engineering Services

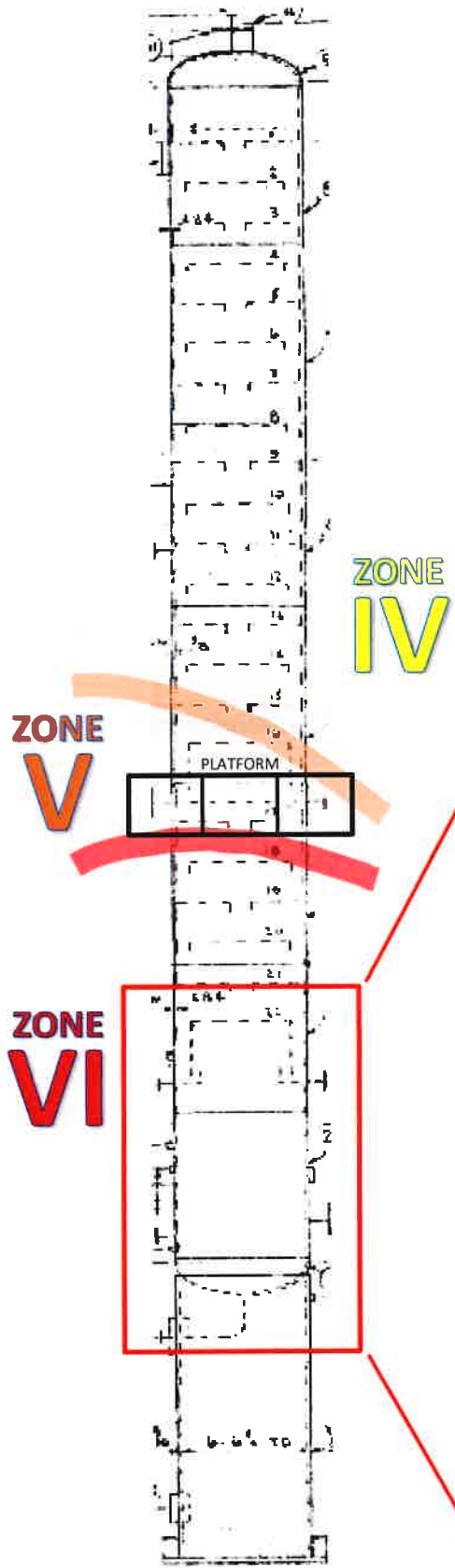
Franklin Perry – 5/16/2018

Attachment to:

04C-V06 Inspection Memo (Rev. 0)

Privileged and Confidential  
Prepared at the Request of Counsel

 Shell Hardness Locations



## MEMORANDUM

**DATE:** 5-16-18  
**TO:** Gary Johnston

**FROM:** Franklin Perry  
**RE:** 04C-V08, LSR Stabilizer Column, Inspection Request (Rev. 1)

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### 04C-V08 LSR Stabilizer Column

The following inspection items are required at all locations specified on the attached drawing. This is a preliminary inspection due to limited access. Further inspection will be necessary to deem the vessel fit for service.

1. Perform Brinell hardness testing at accessible locations marked on the attached drawing, with surfaces prepared by hand file. Refer to Stress Engineering Field Hardness Measurement Protocol for Telebrineller, Rev. 1 for hardness testing requirements.
2. Perform UT thickness measurement at all hardness measurement locations except on flanges.
3. Visually inspect all nozzle faces for signs of distortion.

## O4C-V08

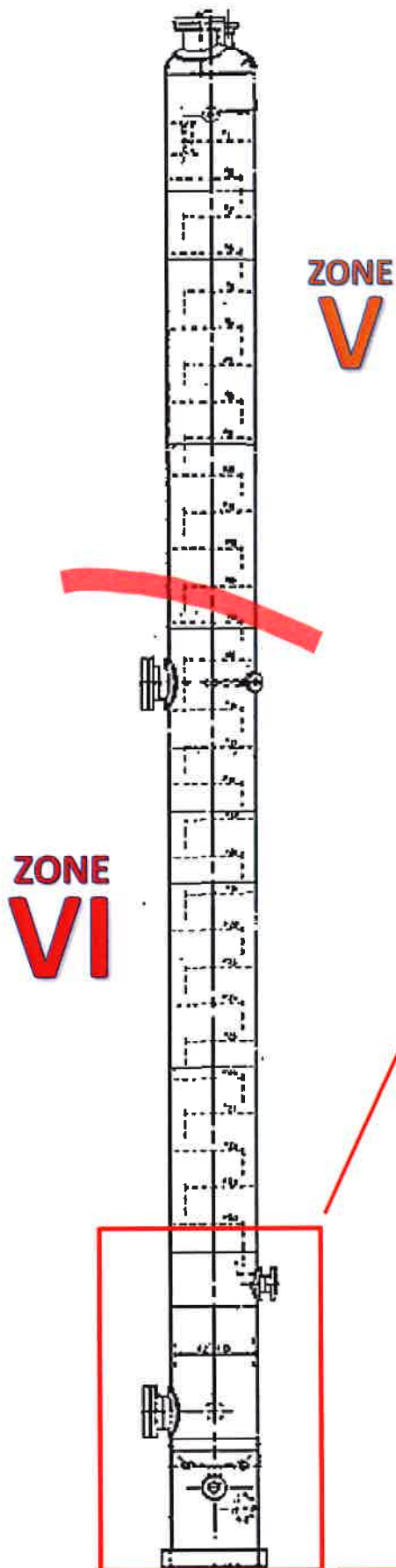
Stress Engineering Services

Franklin Perry – 5/16/2018

Attachment to:  
O4C-V08 Inspection Memo (Rev. 0)

Privileged and Confidential  
Prepared at the Request of Counsel

 Shell Hardness Locations



## MEMORANDUM

**DATE:** 5-16-18  
**TO:** Gary Johnston

**FROM:** Franklin Perry  
**RE:** 04C-V30, Deethanizer, Inspection Request (Rev. 0)

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### 04C-V30 Deethanizer

The following inspection items are required at all locations specified on the attached drawing. This is a preliminary inspection due to limited access. Further inspection will be necessary to deem the vessel fit for service.

1. Perform Brinell hardness testing at accessible locations on the shell under the lower platform marked on the attached drawing, with surfaces prepared by hand file. Refer to Stress Engineering Field Hardness Measurement Protocol for Telebrineller, Rev. 1 for hardness testing requirements.
2. Perform UT thickness measurement at all hardness measurement locations except on flanges.

# O4C-V30

Stress Engineering Services

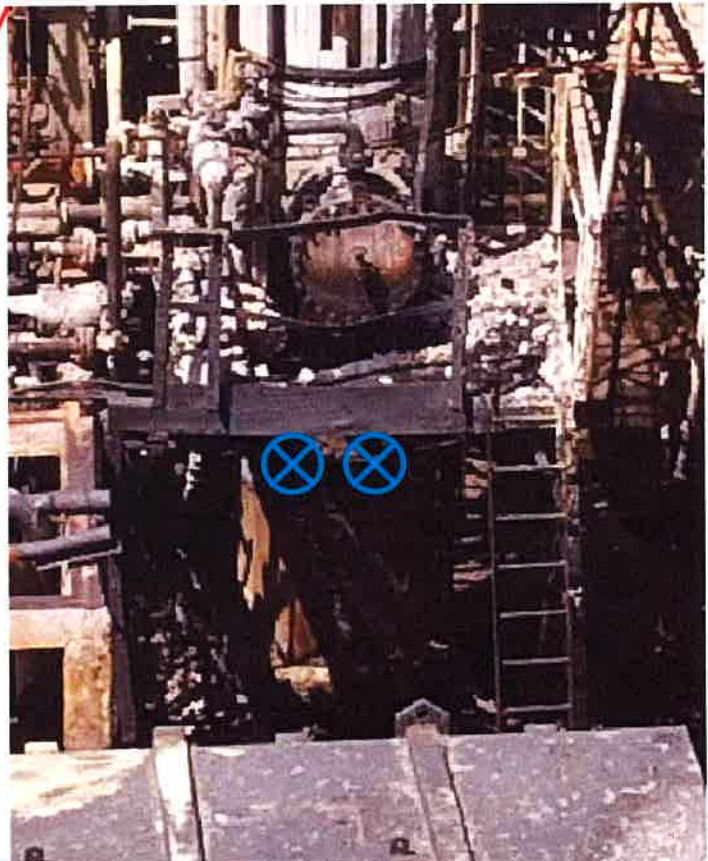
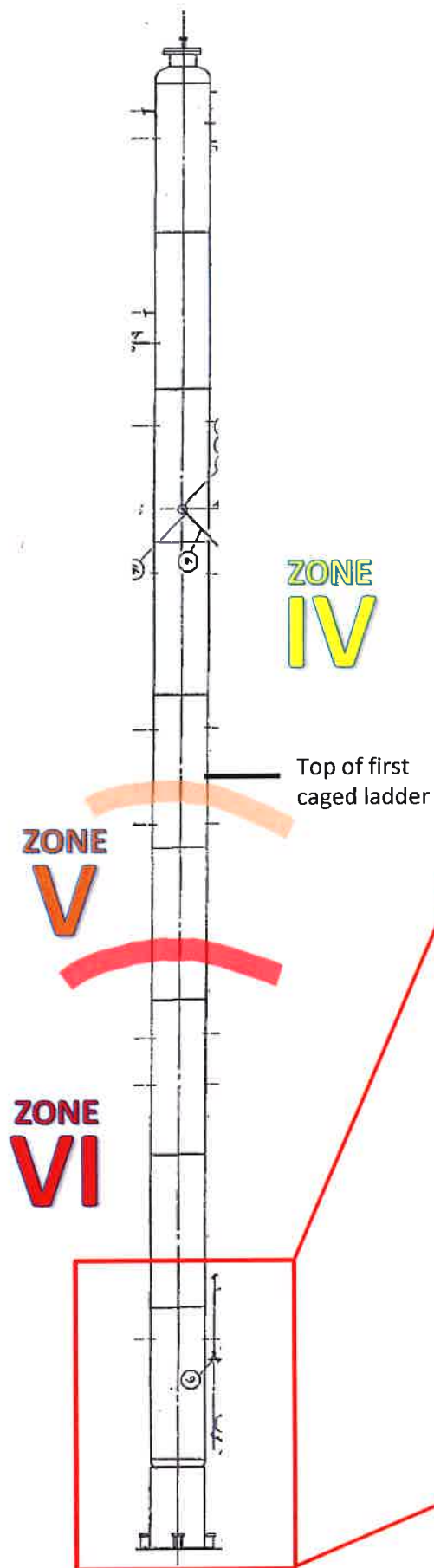
Franklin Perry – 5/16/2018

Attachment to:

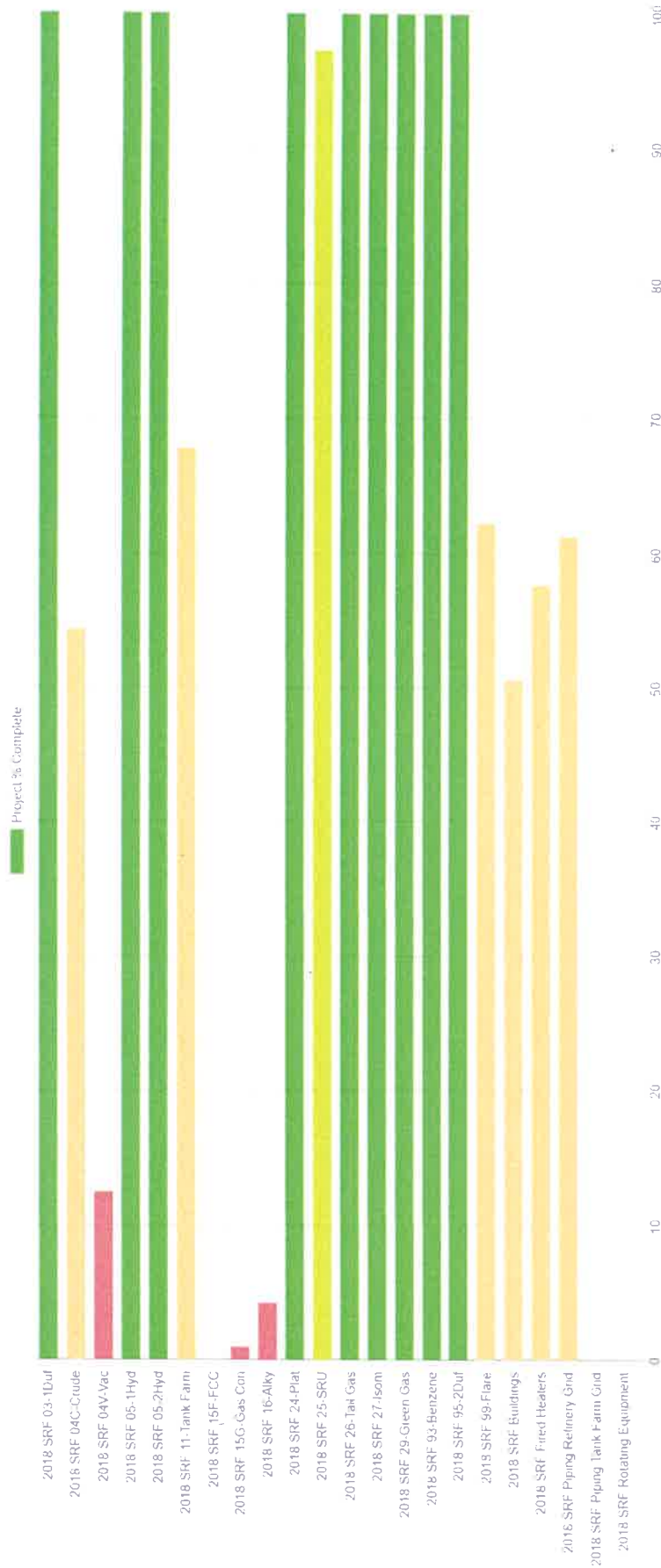
O4C-V08 Inspection Memo (Rev. 0)

Privileged and Confidential  
Prepared at the Request of Counsel

⊗ Shell Hardness Locations



# Project Progress Chart





# Superior Refinery Fire

## Hot Zone PPE Requirement Change

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Authored by: Peter Friedman

Date: 5/18/2018

Approved by:

Operations Section Chief: 

Safety Officer: 

Incident Commander: 

Prepared by Operations Section

## Hot Zone PPE Requirements Risk Analysis

In order to more effectively execute the incident objectives of incident stabilization, evidence preservation, and minimizing environmental impacts while ensuring the safety of the public and refinery personnel, the following revisions will be made to the Hot Zone PPE requirements.

### Current Hot Zone PPE Requirements:

- Bunker Gear
- 4 gas monitor and Radio (1/Team)
- H2S Personal Monitor
- ERT Escort (ERT SCBA ready)

### Revised Hot Zone PPE Requirements:

- Refinery PPE (FRC)
- 4 gas monitor and Radio (1/Team)
- H2S Personal Monitor
- Minimum 2 Person Teams

Based on an evaluation of the primary hazards listed below, it is appropriate to remove the requirement to wear bunker gear and be escorted by ERT members in the hot zone. The risk of flash fire injuries is reduced through use refinery FRC, continuous air monitoring, and in conjunction with immediate evacuation policies. At this time, other hazards outweigh the difference in flash fire protection between FRC and Bunker gear.

### Hazard Analysis - There are 4 primary hazards within the hot zone:

- Asbestos Exposure
- Heat Exhaustion
- Flash Fire
- Fire Response

Asbestos Exposure: During asbestos remediation activities, additional PPE is required such as double Tyvek suits and half mask respirators. When worn in conjunction with bunker gear, elevated risks of Heat Exhaustion and Physical Exhaustion are likely to occur. If only bunker gear is worn, workers would not meet the PPE requirements to remediate asbestos.

Heat Exhaustion: Moving into the summer months, Heat Exhaustion is a growing risk while wearing bunker gear. Minimizing the duration of time spent wearing bunker gear becomes more difficult if additional layers of PPE are worn on top. In addition, in order to properly decontaminate the Tyvek suits, additional time needs to be spent in decontamination areas that extend the duration bunker gear would need to be worn.

Flash Fire: A flash fire is a fire that spreads rapidly through a diffuse fuel, such as dust, gas, or the vapors of an ignitable liquid, without the production of damaging pressure. In a flash fire event, flame-retardant treated clothing (FRC) is required by refinery safety policy. Both Refinery FRC and Bunker Gear

are designed to provide protection in the event of a flash fire. The outer shell of Bunker gear is made out of FRC material. The protection provided by bunker gear includes:

- Thermal Liner – Provides thermal protection and heat stress reduction.
- Moisture Barrier - Provides resistance to water, chemicals, and viral agents.
- Outer Shell - Provides flame resistance and also protects firefighters from cuts and abrasions while they are on scene.

The additional capabilities of Bunker Gear are primarily beneficial in a fire response scenario. FRC will provide flame resistance as does the Bunker Gear.

In order to reduce the risk of a flash fire, refinery operators monitor the units every 4 hours to log pressure readings. There is also continuous air monitoring within the hot zone for VOC's to alert workers of increases in flammable gases in the air. 4 – gas monitors are required for every team entering the area which provide LEL reading in the event a flammable atmosphere has started to form. In the event of an elevated LEL reading (>5%), workers are required to stop work and evacuate the area upwind. In the event of a flash fire, workers are to evacuate the area.

Fire Response: Bunker gear is required for ERT Support operations and fire response.